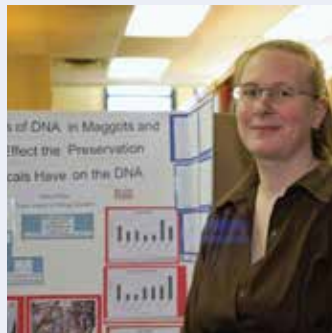# JUDGMENTS *of* QUALITY

Connecting faculty best assessment
with student best work!

ASSOCIATION *for* GENERAL *and* LIBERAL STUDIES

Mission

AGLS serves colleges and universities by fostering strong General Education programs. General Education is that part of the curriculum required of all students and dedicated specifically to liberal learning—the development of knowledge, skills, values, and habits of mind characteristic of an educated person. The members of AGLS comprise a community intent upon improving liberal learning by advocating the centrality of General Education and supporting its continuous improvement.

Goals

Through the AGLS annual conference, through AGLS award programs, and through occasional publications and projects with other associations,

► To support innovation in liberal learning pedagogy and curriculum development;

► To support the continuous improvement of teaching and learning in general and liberal education;

► To promote and advocate for effective, efficient administrative structures and policies that recognize and secure the centrality of general and liberal learning in post-secondary education.

St. Edward's University students

JUDGMENTS *of* QUALITY

Connecting faculty best assessment with student best work!

Association for General and Liberal Studies 2013

John P. Nichols, Editor
Saint Joseph's College

University of North Dakota

To order additional copies, please contact the Office of the AGLS Executive Director:

Joyce Lucke
445 Fifth Street, Suite A
(812) 376-7468
Columbus, IN 47201
joyce@paragonme.net

PROLOGUE

John Nichols—Saint Joseph's College

Genesis & Development of the Project

The key question that gave rise to this undertaking was and is: "How do we assess our graduates' best work in liberal education in ways that match the quality of the work we expect at the highest undergraduate levels of liberal learning?" This question kept surfacing at the annual AGLS conferences in talks on a wide variety of topics, with a "clumping" of occasions around the influence of regional and specialized accreditors. The Association of American Colleges & Universities (AAC&U) formulated its version of our question in this compact form: "What assessments are *worthy of our mission*?"

That is the positive or attracting version of the question. The negative or repelling version asks: "How do we avoid lowering expectations, in our capstones for example, simply because we have to generate data for accountability reports, perhaps even quantitative data?" The participants in this project joined the project, because they are convinced that they have identified and validated assessments that indeed do measure up to, and do not infirm, student liberal education outcomes at the about-to-graduate levels.

At the origin, the project was composed of two groups of institutions, one from the Association for General and Liberal Studies (AGLS) and one from the Association for Core Texts and Courses (ACTC).

The first gathering of the combined groups occurred during the October, 2010 AGLS Annual Conference in Austin, Texas. At this point, the focus was on recruiting eight to twelve institutions to constitute each project group and on defining the project goal as fully and precisely as necessary. The statement of the *goal of the project* at the end of the Austin Conference was this:

> To identify, document, evaluate, write up, and publish ways of assessing student learning at the about-to-graduate levels of liberal learning. It is acknowledged and celebrated that the institutions collaborating in the project will conduct a splendid diversity of programs, with diverse outcomes, and use a wide range of methods of assessment.

By the summer of 2011, it was clear that the AGLS group was well ahead of the ACTC group in terms of definition of the particular facets of the project on which it would work, and these institutions had also already developed and tested creative ways of assessing liberal learning. Quite graciously, the ACTC group, recognizing that the AGLS group would get to the threshold of publication well in advance of themselves, agreed that AGLS should go ahead and publish their results and ACTC would publish its results perhaps one year later. Readers of this monograph, therefore, should anticipate and look forward to a second report issuing from this project in 2014, based on the creative work of the ACTC group.

Enough funding was secured from the Lumina Foundation to support three further gatherings ("convenings" is the Lumina term). For the first of them, representatives from ten institutions spent three hours prior to the 2011 AGLS Conference in Miami, working to understand in depth one another's liberal education com-

mitments and programs, comparing outcomes and assessments at summative levels, and seeking partners for the work groups that would be formed in the project. Some additional communication continued via e-mail in the fall and winter of 2011-12.

In June of 2012, eighteen representatives of the AGLS institutions traveled to the Indiana campus of Saint Joseph's College to work ("intensely," they said at the end) from the evening of the third to noon of the sixth on getting the project up to full speed. They clarified project outcomes, they formed three work groups, and they succeeded both in defining and in beginning to construct their respective contributions to the project (see the four chapters of this booklet). The key design principle for this publication is for it to function as a companion piece for the 2006 *AGLS Guide* to program review and assessment in general education. They also planned presentations for the 2012 AGLS Conference in Portland, Oregon: a panel for one of the plenary sessions, two concurrent sessions, and two roundtable discussions—all of these sessions growing out of the very collaborative and productive three days of work in Indiana.

The challenge for faculty is to do quality assessments of student capstone work.

The third Lumina-funded convening was another three-hour work session at the Portland Conference. Some of that time was spent on final adjustments to the presentations that project members would be making at the Conference over the following three days. The more challenging work for the group was a thorough critique of the pages they had produced since June for the project publication, with the primary purpose of making a unified whole, in accuracy of content and examples especially, out of parts that had been produced by various members. They set a December 1st deadline for final drafts of the chapters—which everyone succeeded in meeting!—and final editing and formatting of the monograph continued into the early weeks of 2013.

Who Are the "They"?

The eighteen people who did the June 3-6 work in Indiana, and therefore ended up with writing assignments for this booklet, are listed below. There are other people who were at one or the other meetings of the project, but who were not at the June work session. A complete list of everyone associated with the project, with titles and e-mail addresses, is in the Appendix.

Champlain College (VT)
    Craig Pepin

Miami Dade College (FL)
    John Frederick
    Barbara Rodriguez

North Dakota State University
    Larry Peterson
    Susan Ray-Degges

Portland State University (OR)
    Vicki Reitenauer

St. Edward's University (TX)
    Cory Lock
    Robert Strong

Saint Joseph's College (IN)
    Fr. Jeff Kirch
    Michael Malone
    John Nichols (Project Director)

University of North Dakota
    Thomas Steen
    Joan Hawthorne

University of St. Francis (IN)
    Elizabeth Kuebler-Wolf
    Matthew Smith

Vincennes University (IN)
    Chad Bebee
    Michael Gress (AGLS Executive Council)
    Laurel Smith

Readers will also find these names listed at the head of the chapters and other items in the following pages, according to the various research and writing contributions individuals made to this publication.

Project group at work

The Title

As befits a publication dealing with liberal education, the title chosen for this monograph embodies a linguistic structure with a classical pedigree of literally dozens of centuries. *Judgments of Quality* is a genitive construction of some special depth. It is both objective and subjective in its intended message.

The classical example of this structure can be found in the old Latin grammars, with "amor Dei" as the quasi-universal example. "Amor Dei" means both the love God has for us and the love we have for God. Mono-valent examples of the genitive might be "love of wine" (objec-tive) and "women of strength" (subjective). The elegance of the classical genitive is that it avoids more ponderous noun constructions, whether of Teutonic (Voraussetzunglosigkeit) or Yankee (student learning outcomes assessment proto-col) origin.

Everything contained in this monograph expresses the both/and thinking that our title communicates. We are striving to improve assessment of liberal learning by connecting the best judgments faculty can make with the best undergraduate performances expected from students. High quality judgments meeting aca-demic work of high quality.

FROM OUTCOMES *to* METHODS

John Nichols—Saint Joseph's College

Getting Started

A full account of the student learning outcomes to which our project institutions are committed—within general education, as well as for the integration of general education and the major—would take far too many pages. One way of efficiently communicating the essential information required to introduce the argument of our report would be to do a short compare and contrast essay between our outcomes and those with some measure of positive recognition in contemporary academic circles. The Association of American Colleges and Universities (AAC&U) has pleased many people with its *LEAP* "Essential Learning Outcomes," and the Lumina Foundation's "Degree Qualifications Profile" is another set of outcomes that has recently become very well known in academe. These two systems will serve very well for this comparison.

AAC&U began its process of setting forth outcomes for liberal education in 1998 with the Schneider and Shoenberg publication *Contemporary Understandings of Liberal Education*. The work had a strong inductive basis composed of analyses of AAC&U, NEH, and FIPSE projects in curriculum design and assessment through the 1980s and the 1990s. The two authors claimed that "a pattern is emerging," "a conceptual framework for undergraduate learning," which consists of the following *learning goals:*

> Acquiring intellectual skills or capacities.
> Understanding multiple modes of inquiry and approaches to knowledge.
> Developing societal, civic, and global knowledge.
> Gaining self-knowledge and grounded values.
> Concentration and integration of learning.

Other agents in academe contributed their visions of "the college-educated person" in later AAC&U projects, most notably regional and specialized accreditors (*Taking Responsibility for the Quality of the Baccalaureate Degree,* AAC&U, 2004) and employers of our college graduates (the "Greater Expectations" project). The current version of the AAC&U set of liberal education outcomes can be found in the "Liberal Education & America's Promise" project, for example in *The LEAP Vision for Learning* (AAC&U, 2011):

> Knowledge of Human Cultures and the Physical and Natural World
> Intellectual and Practical Skills (six categories listed)
> Personal and Social Responsibility (four examples)
> Integrative and Applied Learning.

The "Degree Qualifications Profile" is an ambitious attempt by the Lumina Foundation to invite faculty, students, and various stakeholders in American higher education to put into words what graduates with associate, baccalaureate, and master's degrees should know and be able to do, as a result of the programs they have successfully completed. The DQP has provoked much fruitful discussion and debate. Its essence is captured in "spiderweb" graphics covering these *five areas* of postsecondary learning:

> Specialized Knowledge
> Broad, Integrative Knowledge
> Intellectual Skills (five subsections)
> Applied Learning
> Civic Learning

The Lumina Foundation followed up the 2011 publication of the Beta Version of the DQP with grants to accreditors, associations, and institutions for the purpose of testing and improving the statement of outcomes, and to suggest valid and reliable ways of assessing them.

Comparisons

Overall, the talk at the AGLS project meetings might lead an observer to conclude that our outcomes are much closer to LEAP than to DQP, but that's too facile. There is one major contrast between us and the DQP (#1 below), but many of the outcome statements in the DQP happen to describe some of our (allegedly) "authentic" capstone assignments very accurately. We also do things a bit differently from LEAP, in particular stressing the methods of the various modes of inquiry (AAC&U, 1998) rather than the content produced by those methods (AAC&U, 2011). Here, then, are five attempts to formulate informative comparisons between "us and them."

1. The AGLS institutions are much more invested in moral reasoning than the DQP is.

The DQP makes very little mention of development in moral reasoning, because their authors judged it *not* to be something that can be demonstrated to develop from one degree level to the next. In contrast, five of the AGLS institutions, secular as well as religious, frame their graduation projects as primarily exercises in ethical decision making—with interdisciplinary inquiry, collection and weighing of evidence, and argument in favor of a personal stance completing the performance. One institution adds to all that the requirement of some sort of real action on the position the student takes. Three other members of the group, beyond those five, state their own ethical outcome in much the same language as AAC&U.

Moreover, the five institutions that build capstones around moral reasoning take care to prepare their students to meet the challenges of the capstone project. The combination of a summative project with a plan or pathway for preparing students to perform well in it clearly implies a claim that progress in moral reasoning can be described and assessed—and is assessed in these programs. Clearly, if moral *reasoning* is what is involved, then so is *learning*.

2. The lists of SKILLS are much the same, but AGLS may be a bit more systematic.

Because the institutions in this project pay explicit operational attention to their mission statements, their student outcomes are presented not just as simple lists but as a set of descriptors of graduates that is generated from a mission-based rationale. For example, it would be hard to come up with a cognitive or communication skill that is not already included in either the AAC&U or the DQP list. But the presentation of skills outcomes by at least five of the AGLS schools is not just a list but a system of skills. For example, communication skills are presented by means of a theoretical model that traces the processing of experience from thought to words and then from words to text, including both encoding and decoding activities. From that, speaking-listening and writing-reading skills are derived, and then these are correlated with a set of cognitive skills that renews Bloom's taxonomy in more contemporary terminology.

Both the patterns of outcomes and their very wordings are stabilizing.

3. Links between Specialized, Applied, and Integrative Learnings are creatively pursued by this group of AGLS institutions.

One school, for example, has two capstones, one for integration and one for applied learning, with carryover from the first to the second. Another, within the one capstone course assigns two major papers, one integrative, the other ethical research and application. Five institutions have capstones located in the major, but the qualifying courses are obligated to demonstrate that students perform acceptably (on a rubric) with regard to specified general educa-

tion outcomes. It was already mentioned that one institution has an "action requirement" in its capstone. Moreover, in all of these capstones, an emphasis is placed on using several modes of inquiry but in ways that respect the methodology of the disciplines used. In other words, these project institutions are working with capstone assignments that require creative combinations of the five distinct areas of inquiry in the DQP.

4. The distinctions between two-year and four-year outcomes caused debates.

Because the AGLS group included both two-year and four-year institutions—a happy arrangement that contributed very positively to the discussions within the project—it was guaranteed that discussion of outcomes would gravitate to the way the DQP distinguishes between associate and baccalaureate degrees. The age and lived experience of students admittedly greatly complicates such distinctions, as does the very way one conceptualizes this development—as a staircase, or as a ramp. Basically, however, our two-year colleagues thought the DQP *under*-estimates what knowledge and skills associate degree students can demonstrate; and they claim that their own assessments support their position.

This project focuses on methods of assessment that respect and enhance liberal education at its highest undergraduate levels.

5. Everyone's vocabulary is coming together!

To a striking degree, the terminology of the discussants is converging. The DQP advises institutions to adapt its outcome statements to their "local dialect," and that's where all our comparisons started. But the reverse also happened. One of our schools attempted a translation of its decades-old capstone rubric into DQP language and found the task not at all difficult. Seeing that, others discovered that some of the DQP outcomes under Integrative Knowledge, Applied Learning, and Civic Learning closely matched their own previously existing formulations of what students are expected to demonstrate in their capstones.

The Result of Our Work

The foregoing comparisons are of interest to this AGLS Project for the main purpose of situating ourselves a bit in the conversations and debates inaugurated by AAC&U and the DQP. Much more than outcomes themselves, the main focus of our work is on the *methods* developed to assess achievement of outcomes. The four main chapters that follow this introduction recount the work of three groups of project institutions: how their previous experience contributed to and was somewhat reinterpreted by means of the conversations in the project, and how together they came up with descriptions of promising practices to share with wider circles of colleagues by means of this report.

In Chapter One, three of our institutions trace their individual journeys from assessment as an imposed *burden* to assessment as a (this is their word!) *joy* within the various responsibilities of faculty members. In fact, their chapter argues that three conditions are necessary and sufficient to accomplish such a change in attitude toward assessment, and their chapter is a thorough presentation of these three conditions.

The hypothesis quickly develops that setting up accountability as the primary purpose for assessment is what has derailed the whole movement. If enhancement of learning is the prime objective, then accountability comes much further down in the list of major aims. How does assessment look if indeed learning is placed first? The first aim of assessment then is timely and accurate feedback to students on what they have mastered, what they need to improve, and what their next steps should be. This feedback occurs in the classroom and frequently. Secondly, on a semester or annual basis, the faculty who conduct a program share their assessment results, in efforts to improve the design and conduct of their program and thereby enhance learning. Up to this point, the faculty activities just described are easily perceived as essential parts of the very craft of teaching. With these two activities well managed and documented (*after* they are well performed, that is!), someone can assemble whatever reports to stakeholders are judged to be necessary.

The method of choice among project participants for doing assessments of liberal learning at summative levels of undergraduate education is the *rubric*. Chapter Two provides a brief but amazingly rich presentation on all the virtues of this method of assessment. Rubrics educate students in what is expected of them and, if used properly, can help students develop the valuable skill of self-assessment. At the same time as they boost both the quality and the quantity of the feedback to students, rubrics also increase the faculty member's efficiency in giving this feedback. It could even turn out, with collaborative faculty efforts in designing and applying rubrics, that the general public will eventually come to have confidence once again in at least some of the grades earned and given in higher education.

Six different rubrics used by different institutions in the project are included in Chapter Two. Any of the project participants will be happy to provide further information about these rubrics, and readers will find all necessary contact information for this in the Appendix.

Chapters Three and Four deal with capstones in four-year degree programs. The "elder model," involving a distinct general education capstone to integrate the student's undergraduate experience in connection with institutional mission, is treated in Chapter Three. The "newer model" that somehow combines programmatic and general education outcomes in the same capstone comes in Chapter Four.

Two of our AGLS institutions (Chapter Three) conduct sizable general education programs that aim to influence the knowledge, skills, and attitudes (values) of all their students, regardless of the choice a student makes of a major. Their general education programs and their outcomes thus are closely connected with the Mission of the institution, seen as the essence of its very reason for being. In both instances here, there is a rubric for each Capstone Course that, by summing up what

John Nichols,
Project Director

the college sets forth as its distinctive "mark" on each graduate, effectively functions as a "descriptor" of the student at graduation and as a "compass" that guides student growth and development from first matriculation all the way to graduation.

The distinct general education capstone with its close connection to Mission certainly embodies an effort to do assessment of liberal education at the highest undergraduate level. Depending on factors such as the make-up of the general education faculty and the potency of the general education pathway leading to the capstone, this Mission-derived capstone will also influence some degree of the growth and development that occurs in the student's major or professional program.

The toning down of the "competition" ("war" is a tempting but too strong a term) between general education and professional programs in higher education is easy to explain. Around the year 2000, as assessment became a non-negotiable requirement for accreditations, professional or program accreditors came to emphasize outcomes as much as or even a bit more than inputs in their standards. In developing their lists of professional outcomes, accreditors rediscovered that there was considerable overlap between the traditional outcomes of a liberal education and what their professionals needed to cope with the challenges of the 21st century. Chapter Four presents the creative work that four of our AGLS institutions have done in "wedding" (their metaphor) professional and general education outcomes in the same Capstone Course. Essentially, they make a good case that what they have achieved is much more in the line of creative "united endeavors," rather than an easy and anemic "Peace of Westphalia."

University of St. Francis

NECESSARY CONDITIONS
in a PERFECT STORM:

ENSURING FACULTY OWNERSHIP *in* GENERAL EDUCATION ASSESSMENT

Vicki L. Reitenauer—Portland State University
Barbara June Rodriguez and John G. Frederick—Miami Dade College
Chad Bebee, Michael Gress, and Laurel Smith—Vincennes University

Abstract: In order for assessment processes to be relevant, authentic, and, in the words of Carol Schneider, "worthy" of liberal education, faculty must choose to and be empowered to take ownership as agents of these processes. In this article, the authors will offer three "necessary conditions" for the catalyzing of faculty ownership and suggest that faculty ownership itself is a necessary condition for relevant, authentic, and worthy assessment.

The meeting of the AGLS working group in Indiana in June 2012 provided a fascinating and instructive view into a variety of ways that our institutions frame and implement general education, connect general education efforts to disciplinary coursework, and assess these efforts usefully and meaningfully. Our initial gathering presents a study in self-organization around a number of different themes that emerged during our discussions, and, as such, offers interesting insights into strategies and methods we might pursue as colleagues exchanging perspectives developed through assessment praxis on our different campuses. For us, assessment—including *thinking* about assessment—must be a collaborative process, and, in fact, a creative process, too. How many of us in higher education have been socialized to think of assessment as primarily a burden, a nuisance, something

that gets in the way of our *real* work on campus? How many of us view assessment as a storm whipping up and moving towards us on the heels of a new administrator or in front of, say, a team of accreditors? What might it look like and mean for us to transform that response and see assessment as *necessary* to doing our good work even more successfully, as a vibrant inquiry into the nature of learning and relating to others as teachers and learners—as, even, a *joyful* process that brings us closer to others in our learning communities and to our own professional practices?

For the group of us who gravitated together to think about assessment and prepare this article, an initial impulse towards collaboration came in our recognition that we share an interest in understanding the issues embedded in assessment at the community college level and

Portland (OR) State University

how this assessment might inform a greater understanding of how community college graduates enter four-year universities (for those who choose to do so). Without a clear idea of how our discussions might evolve, we six initially set out on a multi-day conversation to discover what contribution we might collectively make toward a better understanding of meaningful assessment.

As faculty members, administrators, and folks who have served in both roles, we started by sharing stories about the successes and challenges we have experienced in assessment through our varied institutional roles. As we talked, we started making sense of the threads that connect and interest us and, in fact, constitute the valuable things we as a group have to say. Specifically, we share a conviction that successful assessment—by which we mean assessment that is genuinely useful and authentically meaningful not only to high-level administrators and accrediting bodies but also to faculty, to department chairs and program directors, and to the students our institutions were founded

to serve—requires the empowered participation of faculty who experience both ownership in assessment and a real investment in being part of the assessment process.

Through experiences with assessment practices that are highly contextual to our campuses, we discovered *three necessary conditions* for ensuring faculty ownership of assessment, conditions that also make a real difference in our teaching and our learning:

> Engaging as classroom teachers
> Being supported and supportive at the departmental, programmatic, and institutional level
> Embracing an ongoing conversation beyond the data

We highlight three case studies in creating these necessary conditions from our experiences in assessment in each of our institutional contexts. We have keyed each section to one of the three conditions named above, although each case study also reflects elements of each of these conditions.

ENGAGING *as* CLASSROOM TEACHERS

Portland State University (PSU) is Oregon's largest and most diverse public university, located on 50 acres in downtown Portland, and with a total enrollment of 30,000 undergraduate, graduate, and certificate students. With more than 60 undergraduate and 40 graduate programs in fine and performing arts, liberal arts and sciences, business administration, education, urban and public affairs, social work, engineering and computer science, Portland State offers more than 226 bachelor's, master's and doctoral degrees.

Portland State's nationally-recognized general education program, University Studies, resulted from an intensive curricular redesign process that took place in the mid-1990s. The program features a 15-credit, theme-based, year-long first-year academic experience (Freshman Inquiry); three distinct 4-credit gateway courses taken in the second year (Sophomore Inquiry); three distinct 4-credit upper-division courses (Junior Cluster), housed in various disciplines, which follow from one of the student's Sophomore Inquiry courses; and a 6-credit senior-level service-learning course (the Senior Capstone), in which students work in interdisciplinary teams to conduct a project in collaboration with a community partner. All courses in University Studies address the four goals of the program: appreciation of the diversity of the human experience, social and ethical responsibility, communication, and critical thinking. Over the course of an academic year, more than 240 sections of approximately 75 distinct Capstone courses are offered, with class sizes averaging 15 to 20 students.

It has been particularly challenging to conduct meaningful and useful assessment—assessment that provides valuable information on the levels of both course and program—in the Capstone program, given the dynamic nature of these courses and the varied real-world products that students produce in relationship with community partners.[1] The most recent development in Capstone course assessment has perhaps been the most illuminating one to date. Since 2008, Capstone faculty have submitted comprehensive course e-portfolios, with each academic year representing the assessment of one of the four University Studies goals. In 2008-09, for example, course portfolios addressed the "appreciation for the diversity of the human experience" goal; "social and ethical responsibility" was the focus of 2009-10; and "communication" was assessed in 2010-11. As of this writing in June 2012, faculty e-portfolios investigating "critical thinking" are being compiled and readied for analysis by a team of reviewers. This will conclude the first full cycle of the assessment of the four University Studies goals at the Capstone level through the use of course e-portfolios.[2]

From the very beginning of University Studies and the piloting of the first Capstone courses, faculty have assumed pivotal roles in designing, implementing, analyzing, and communicating assessment strategies and results within and beyond the program. The size and scope of Portland State, and thus of its holistic general education program, has required that administrators invite faculty into processes around both the development of curriculum and assessment of student learning. Beyond this matter of scope, however, visionary administrators in the early days of the program also embedded within its organizational structures and processes a clear call for faculty involvement at all levels of the program, with the understanding that such involvement is necessary to ensure continuous course improvement by providing the sorts of faculty development opportunities that lead to that improvement in catalyzing student learning.

From the perspective of the director of the Capstone program, it all starts with inviting faculty who are prepared to fully engage with the demands of service learning—with all of the ambiguity and moving-target dynamism

Portland State University: Faculty Reflection Assignment

Each year University Studies, the general education program at Portland State University, invites faculty teaching at the senior Capstone level to participate in a stipended portfolio assessment process. These are the prompts for the faculty reflective essay component of that portfolio in 2011–12, when critical thinking was the University Studies goal in focus.

Capstone students report in the annual Capstone course evaluations that the course enhanced their critical skills; through this assessment we intend to learn how the Capstone improved these skills. How does the Capstone provide a learning context in which the active development and deployment of critical thinking skills results in tangible achievement for the students themselves, the classroom learning community, and the community partnership in which they are engaged? What pedagogical practices most successfully provoke that learning? And how do students provide evidence, through their completion of assignments and other coursework, that such learning has taken place?

Start by reading Blythe McVicker Clinchy's article "On Critical Thinking and Connected Knowing," which offers alternative ways to consider what critical thinking is and looks like. (This article, originally published in the journal *Liberal Studies*, was reprinted in Campus Compact's *Introduction to Service Learning Toolkit*.) Then respond to the following questions, in whatever way makes sense to you. We anticipate written reflections of approximately 3-5 pages in length, while encouraging you to write as much as you would like to in your exploration of critical thinking in your Capstone class.

- ▶ How do you define "critical thinking" relative to this particular course? What does it mean for your students to engage in critical thinking? What does it look like? How do you know that they're doing it? How do *they* know that and when they're doing it?

- ▶ What particular elements of your course design support students' engagement with critical thinking? How do the structure of the course, the assignments, the classroom activities, the collaborative work with your community partner(s), and the final project provide opportunities for students to experience and advance their critical thinking?

- ▶ What is the best evidence of student learning related to critical thinking that emerges from your course? What would you choose to highlight (to colleagues at PSU and beyond) about your course that helps enhance students' abilities to think critically as individuals and as members of a learning community working on a real-world project with a community partner?

- ▶ If a student were to track you down in ten years' time and say that what she most remembers from her experience in your course was how she understood, developed, and used her capacities as a critical thinker, what do you imagine she would point to as specific, concrete elements of the course that led to that awareness?

that entails—to design and teach these courses. From the earliest stages of the course design process, potential new faculty (whether they are brand-new teachers or simply new to teaching Capstone courses at Portland State) receive mentoring and support from seasoned faculty in the program, who assist them to think through not only pedagogical issues but also approaches for developing mutually-beneficial community partnerships.

The Capstone course approval process at Portland State is a rigorous one, and support for undertaking that process abounds. Engaged teaching is a bottom line in Capstone courses, as there's really no other way to successfully negotiate the demands on the multiple constituents in a Capstone course, and there's nothing like teaching a service-learning course to remind an instructor that she's a lifelong learner. With the number of moving parts in any community-engaged course—from aligning course content with community work to negotiating across cultural and other differences (including the distinct cultures of the academy and the community partner's context)—the solid supporting efforts of seasoned practitioners, who offer one-on-one mentoring, twice-yearly Capstone program retreats, and monthly brown-bag workshops, have been crucial and consistent features of faculty support and development on the programmatic level from the beginning.

A focus on engaged teaching also means that faculty in the program regularly receive formative feedback at the mid-point of a given term. In every new course and with every new faculty person, a seasoned Capstone instructor conducts a mid-term "small group instructional diagnosis"[3] with students in the course in order to hear directly from them what is helping them learn, what's getting in the way of their learning, and what concrete suggestions they have for changes that could be implemented in the remaining weeks of the course to improve their experience and their learning. At the start of this process, the facilitator of the diagnosis meets with the faculty person to hear about the dynamics of the course from the faculty's perspective. The facilitator then invites the students into dialogue about the course with the instructor out

of the room, compiles the students' comments, and again meets with the instructor to share the results and offer assistance in making sense of the results and initiating changes to the course. In this way, faculty are invited to get useful information about students' experiences in their course while it is operating, while modeling for students what it looks like to ask for, receive, and implement formative feedback.[4]

At the end of the term, then, faculty submit material for their course e-portfolio, which provides both the University Studies program and its constituents with valuable information at both the course and programmatic levels. Among the artifacts that faculty collect for these portfolios are the following: a three-to-five page faculty reflection on the University Studies goal under review and how the faculty embeds learning activities to address that goal in the course; a collection of student reflections on the same goal and how the students engaged with the goal through their coursework, including their work with their community partner; copies of the assignment guidelines for the student reflection, along with the course syllabus; and artifacts from the community work. In addition, digital footage of at least some Capstones is taken each year and included in the e-portfolio. Participating faculty in any given year receive a stipend to acknowledge their investment of time, energy, and effort in this process, as do reviewers and scorers of these portfolios.

These compendia have provided a higher dimensional view of the kinds of teaching and learning that happen in Capstone courses than any assessment strategies previously used. Where there had been a flatness before—a sort of bleaching of the Technicolor experience that is the vibrant give-and-take of many Capstone courses—reviewers now see a fuller, contextualized picture of how faculty have intentionally embedded the University Studies goals in their Capstones, how students experience the results of those efforts, and what the course offers to community partners as a result of that engagement.

The result of all of the modes of assessment used in the Capstone program—the relational and logistical processes around course development, the conducting of formative small group diagnoses at the midpoint of the term, and the compilation of summative course e-portfolios—brings the program back to the earlier stages of this cycle: the intentional recruitment of faculty who will become engaged service-learning practitioners and the ongoing multi-level support for their engagement. New faculty in the program get seasoned and join in the process of actively mentoring those who are just arriving—and another academic year gets underway.

Portland State has its capstone professors compose e-portfolios that assess one of the goals for University Studies each year.

Chad Bebee and
Vicki L. Reitenauer

BEING SUPPORTED *and* SUPPORTIVE *at the* DEPARTMENTAL, PROGRAMMATIC, *and* INSTITUTIONAL LEVEL

Worthy assessment occurs in the classroom, so it affects faculty on a daily basis. Once faculty make the connection between their classes and the knowledge, skills, or values they want students to gain in their disciplines or programs, building and sustaining a culture of assessment is much more viable. In "Establishing a Culture of Assessment," Weiner (2009) articulated the role of faculty well: "If the faculty does not own it, it is not going to happen. At best, if faculty fail to assume responsibility for assessing student learning outcomes, a college will have a faculty of 'defiant complaint'." Miami Dade College (MDC) understands and values the role of faculty ownership in assessment, and we have actively forged a culture of faculty investment through several institutional initiatives.

Miami Dade College is a large, multi-campus college in the southeastern United States that has been strategic in its efforts to champion teaching and learning initiatives that address accountability as well as student achievement and success. With more than 170,000 students and the complexity of eight unique campuses, the College strives to engage and support over 800 full-time and 1800 part-time faculty in the College-wide Student Learning Outcomes Assessment (CSLOA) and Program Learning Outcomes Assessment processes.

Miami Dade College manages intimidating size with administrative support and faculty ownership of assessment.

The College-wide Student Learning Outcomes Assessment is a collection of eleven scenario-based, authentic assessment tasks designed by college faculty to measure potential term graduates' attainment of the College's Ten Learning Outcomes, which reflect the College's general education core. The assessment results are used to inform college-wide discussions about strategies to improve student learning, including co-curricular learning. Most tasks assess multiple learning outcomes that are integrated in the task. By recruiting faculty to be directly involved with this process and keeping it separate from promotion and tenure evaluation, as has been recommended by some researchers, the College promotes active engagement of faculty by fostering self-examination and critical questioning.[5]

Miami Dade College has built foundational institutional structures to ground the work of assessment while ensuring that faculty are core stakeholders in that work. The Learning Outcomes Coordinating Council (LOCC) is composed of 30 faculty and administrators, with faculty making up approximately 90% of the Council's membership. Beginning in 2005, the Learning Outcomes Coordinating Council has been charged by the Provost for Academic and Student Affairs with analyzing the consistency of the curriculum and its outcomes through assessment. Since the LOCC is faculty-driven, the Council knows what occurs in the trenches and establishes annual goals based on this knowledge. For the 2012-2013 academic year, the Learning Outcomes Coordinating Council will host monthly meetings on Miami Dade's eight campuses with a twofold purpose: 1) to engage faculty in critical discussions of their course and curriculum maps, and 2) to provide training that focuses on assessment of learning outcomes on the program level.

Another instutitional initiative, the Learning Outcomes Assessment Team (LOAT), is composed of 30 full-time faculty members from various disciplines who apply and are selected to be members of the team. The Learning Outcomes Assessment Team is charged with the work of scoring student artifacts, and the faculty

Miami Dade College

who participate on this team receive small stipends for their work.

A key step taken to catalyze faculty buy-in to assessment required the explicit valuing of this work on the part of Miami Dade College administrators in ways that were meaningful to faculty. Miami Dade College reinforced its commitment to the general education learning outcomes initiative by establishing it as a key value for the College's 2010-2015 Strategic Plan. The value of a culture of inquiry and evidence "is characterized by the commitment of faculty, staff and students to an accountability for learning excellence, through the achievement of measurable learning outcomes, innovative assessment methods and data-driven decisions that foster adaptability in programs and services" (MDC, 2009). To uphold this value, Miami Dade College provides tangible support to its faculty through professional development and training opportunities, including assessment and other workshops. To maximize the opportunities for both full- and part-time fac-

ulty to participate in professional development opportunities, workshops are offered face-to-face, online, and in webinar format. In addition to the Director of Learning Outcomes, who functions as a member of the Office of Institutional Effectiveness, the College has also provided the resources for two full-time staff persons to support the learning outcomes initiative; one person focuses on program assessment planning and implementation and the other on assessment-related training. This type of tangible support fosters an environment in which worthy assessment occurs because faculty are invited to acquire the necessary skills to analyze their program level outcomes assessment results and make informed decisions about instruction and the curriculum.

Such meaningful support from College administrators allows faculty to assume full ownership of assessment without feeling that it is mandated or that academic freedom is being infringed upon. Miami Dade College does not require the programs to develop spe-

Assessment at Miami Dade College

College-wide Learning Outcomes

As graduates of Miami Dade College, students will be able to:

1. Communicate effectively using listening, speaking, reading, and writing skills.
2. Use quantitative analytical skills to evaluate and process numerical data.
3. Solve problems using critical and creative thinking and scientific reasoning.
4. Formulate strategies to locate, evaluate, and apply information.
5. Demonstrate knowledge of diverse cultures, including global and historical perspectives.
6. Create strategies that can be used to fulfill personal, civic, and social responsibilities.
7. Demonstrate knowledge of ethical thinking and its application to issues in society.
8. Use computer and emerging technologies effectively.
9. Demonstrate an appreciation for aesthetics and creative activities.
10. Describe how natural systems function and recognize the impact of humans on the environment.

College-wide Student Learning Outcomes Assessment

The assessment tasks are administered online except for the tasks that require videotaping.

- ▶ Only one task is administered at a time and is designed to be completed in a 50-minute class period.

- ▶ Most tasks assess multiple college-wide learning outcomes.

- ▶ The Learning Outcomes Assessment Team scores student artifacts using a double-blind scoring process and a 4-point rubric.

- ▶ Prior to the scoring process, the Learning Outcomes Assessment Team participates in a norming/calibration session to improve inter-rater reliability.

- ▶ Student scores are aggregated to provide a snapshot of the graduates' level of achievement, which allows for comparisons from year to year.

- ▶ *An excerpt from a task:* "Imagine that you are part of a production team for a television series entitled 'The Global Citizen.'" From a list of possible global issues, "what considerations and process would you use to identify the most pressing issue, and how would you convince your production team of the urgency of this issue?" (This task measures Learning Outcomes 1, 4, and 5.)

cific types of assessment measures, nor does it mandate the size of the student sample to be assessed. The College trusts the expertise of faculty in the programs to make these determinations with guidance and support from assessment staff as needed. The College also evaluates its own effectiveness regularly; for example, in Spring 2011 MDC administered an online survey of faculty to gain their perspectives on the effectiveness of the faculty development efforts already in place. As a result of this evaluation, a Peer Facilitation Workshop was developed to train faculty to serve as mentors to colleagues in the College's assessment processes. In this way, Miami Dade College fosters an environment in which faculty support one another's assessment efforts. Faculty members of the Learning Outcomes Assessment Team and the Learning Outcomes Coordinating Council serve as liaisons, peer facilitators, and ambassadors of the College's learning outcomes assessment initiatives.

Ongoing conversations, both formal and informal, between the various College stakeholders must occur regularly in order to sustain this climate of support. At Miami Dade College, the Campus Dialogue is a formal venue for the sharing of college-wide student learning outcomes. In addition, the Campus Dialogue is an opportunity to engage faculty in conversation about ways the faculty member can use assessment results to improve teaching and learning. This Dialogue and other opportunities for continuing conversation about assessment have proved to be effective mechanisms for increasing faculty investment in assessment. MDC's Office of Institutional Research conducted a study (Bashford and Frederick, 2011) about faculty engagement in the Learning Outcomes Initiatives; their data showed that "79% of the faculty respondents indicated that they regularly participate in campus dialogues or other meetings to discuss ways to improve student learning based on assessment findings." One respondent commented that "although I have a strong background in assessment practices for my field, the campaign to make sure that instruction

is 'intentional' has made my teaching stronger and better. Aligning my courses' competencies with the college-wide outcomes and making sure that each and every assignment is meaningful has been a very worthwhile experience." Additionally, Bashford and Frederick found that "71% of faculty agreed that they use assessment data other than classroom-based techniques to make decisions about teaching and learning in the classroom," and "68% of faculty agreed that they could think of a number of instances where assessment data have helped to improve student learning." In order to improve learning and student performance on targeted outcomes, faculty members have incorporated high-impact practices in their classes: learning communities, embedded authentic assessments, and intentional co-curricular activities, such as service-learning projects with student services departments.

Additionally, Miami Dade College faculty engage in the ongoing national conversation about assessment through both participating in and facilitating webinars and conferences. Faculty are regularly called to serve as consultants and resources to other colleges seeking to improve their assessment processes. Being valued participants in national conversations about assessment has significantly reinforced the value that engagement in assessment has for Miami Dade faculty.

Over the last seven years, Miami Dade College has created a culture of inquiry and evidence to sustain our learning outcomes initiatives. The core of the College's general education assessment is the dedication and effort of its administrative staff, including assessment professionals, to meet faculty where they are and to mobilize them to continue to think of assessment as an opportunity to improve teaching and learning.

Laurel Smith and
John G. Frederick
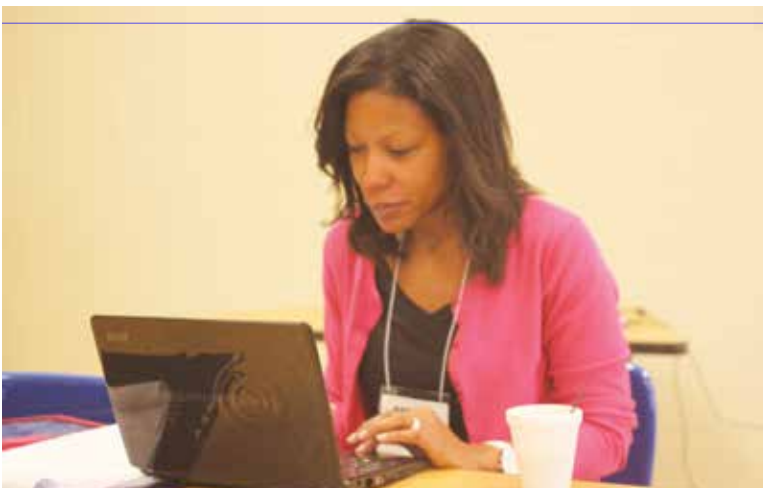
Barbara June Rodriguez

EMBRACING *an* ONGOING CONVERSATION *beyond the* DATA

Vincennes University (VU), a comprehensive community college with some baccalaureate programs, has traditionally served two groups of students: those who intend to complete two-year programs for employment requiring the associate degree, and those who plan to transfer to a four-year school after meeting the first two years of course work for the bachelor degree. The mission of VU requires faculty to help students master and demonstrate critical thinking skills before a capstone is attempted. The literature outcomes assessment program addresses student learning of higher level skills in 200-level, general education literature courses for students with diverse majors. This narrative reflects what we have learned as a faculty in a single department and how that experience connects to broader assessment initiatives on our own campus and beyond. As we explore the necessary conditions for faculty ownership of general education assessment, we have considered various questions. How do we define faculty ownership and how does our definition reflect the climate for student learning at VU? How has the literature outcomes project at VU addressed our students' skill for integrative thinking? Why do we believe that VU's literature outcomes project (with its focus on students at the sophomore level) significantly informs discussion of four-year capstone experiences and of the Lumina Foundation's Degree Qualifications Profile?

The VU English Department story begins with the last of the three necessary conditions: embracing an ongoing conversation beyond the data. The English Department was a classic example of a group of faculty largely disengaged from the purpose and value of assessment, or maybe it was just the victim of an earlier, commonly held view of assessment as data collection merely for accountability purposes. The Department was not assessing its 200-level literature courses, courses intended to address critical thinking skills beyond basic competencies for written expression. Assessment was limited to composition courses and linked to student placement. Faculty understood that a duty was to be performed, but this "placement-or-assessment-or-whatever" responsibility felt like it was imposed upon faculty, without a sense that faculty might define and direct that responsibility. "Ownership" was not a term associated with the process; in fact, faculty confusion, and even disdain, characterized the atmosphere surrounding assessment.

Before the current effort to assess literature outcomes could go forward at VU, the conversation about assessment in the English Department had to be transformed. The transformation was triggered by a departmental conversation centered on the *values* that full-time and adjunct faculty identified in student writing.[6] The conversation about values moved the Department's focus away from "What do administrators want from us?" to "What do we want for our students?" Over a four-year period, faculty ownership of assessment in English has become an organic part of department work. This experience shows that the ongoing conversation for faculty ownership is not only *beyond* the data, but *before* the data.

Once the English faculty at VU recognized that assessment was grounded in a values discussion, it was a natural progression to consider the development of common literature learning outcomes to be shared in all the literature classes. The recognition that common outcomes could benefit both English majors and general education students shifted the nature of the department's understanding of assessment as "data-gathering" and "assessment for accountability" to a conversation about what we valued in literature instruction and its goals for student learning—what we hoped students would gain

from any literature class. We agreed that all students of literature would complete a synthesis essay at the conclusion of their course. The synthesis essay, coupled with a reflective assignment, has improved the conversation about the purpose of literature courses and enables faculty to recognize what students are learning and the applicability of those lessons to their life experiences and personal perspectives.

Values are realized in the classroom through engaged classroom instruction. The literature outcomes project uses best practices of formative assessment from composition courses and widens the circle of learning with additional activities and expectations. Certainly, critical thinking is a value and expectation to be assessed even in developmental writing courses. Integrative thinking and analytic inquiry are not skills that make their debut during a student's work on a senior capstone. Higher level thinking skills are encouraged long before students are seniors; these skills, after all, are at the heart of liberal studies. Our assessment of these skills in literature courses reflects our recognition that students must have multiple opportunities for integrative thinking. Moreover, our collective understanding of the Degree Qualifications Profile is based on an awareness of the analytic challenges for students at all levels.

One of VU's Essential University Outcomes states that students can "apply critical and creative thinking skills to solve problems." This essential outcome guided the English Department's literature course assessment strategy to have students write a synthesis essay in all 200-level literature courses. The synthesis or integrative analysis essay, assigned in the last quarter of the course, involves the reading of primary and secondary sources and requires students to connect course reading to some work beyond the literature course. Grades for the essay and a reflective writing will be part of the student's final grade in the course. The synthesis assignment that is assessed in the 200-level literature courses addresses all literature outcomes and is evaluated with a rubric devised by the English faculty, based on research of the AAC&U VALUE rubrics for Integrative Learning, Critical Thinking, Creative Thinking, Inquiry, and Analysis.

Diachronic Dialogues

A capstone course is designed to exhibit cumulative learning. Rubrics, the method of choice for the assessments described in this monograph, likewise have temporal as well as evaluative components built into them. The Degree Qualifications Profile brought national attention to a progression in learning outcomes from associate to baccalaureate to master's levels. For all these reasons, plus the simple practical fact that this project included a fortunate mix of two-year and four-year institutions, we discovered a very fruitful field of inquiry in the course of our project conversations.

Our colleagues from Vincennes University created the following set of analytical and critical questions to stimulate intra- and inter-institutional dialogue about appropriate outcomes at different degree levels. These questions clearly merit follow-up presentations and discussions at future AGLS conferences.

1. What kind of activities will prepare students for capstone work?
2. Is the standard for a two-year student a "milestone" or something more?
3. What are the relationships between two-year and four-year capstone rubrics?
4. Is there a danger in setting the bar too high at the community college level?
5. What would be the meaning of a "summative" judgment at the associate level?
6. What can faculty for four-year capstones learn from two-year institutions?
7. How and when do faculty communicate capstone outcomes to students?
8. How do faculty determine appropriate levels of mastery for content and skills? Has the Lumina Foundation (DQP) accomplished this for us?
9. Most basically, do students understand "outcomes talk" and embrace either two-year or four-year goals for their education? Should they? If so, how?

(Dialogue to be continued…)

Embracing a conversation beyond the data requires that we share our ideas and our failures, what works and what's next. The ongoing work to devise our rubric is a good example of the power in conversation. The rubric discussions took place over a couple of Friday afternoon meetings and through email exchanges. But having a rubric did not mean our work was done. Once we had a rubric in place, we met to look at actual student artifacts and discovered that our rubric needed revision. Specifically, we needed to identify stronger connections between our goals and our rubric. To facilitate the process, we used a survey to plot our way forward; we met in trios to find ways to discover how we could agree upon values in the student papers; and we gave ourselves the time to be comfortable with the developing process. Again, with time and conversation, we revised our rubric as follows: two outcomes overlapped, so we moved from five to four outcomes; instead of four levels to designate skill levels, we now have five.

Ongoing conversations among faculty members about shared values led the Vincennes University English Department to an effective assessment program.

While we recognized the rubric as a work in progress, two particular strengths were identified as we concluded our assessment for 2011-12. First, the department has devised an assignment and an assessment rubric to determine the critical thinking skills students develop as they move from basic writing skills to writing that reveals higher order thinking. At the 200-level, these skills should be at least at "sufficient" level, and as the students advance, the scores should go to "proficient" and even "exemplary." Second, we have allowed for individual instructors to have some creative leeway in defining the parameters of the synthesis and reflective writing assignment. The freedom to imagine this assignment in different ways has produced multiple types and qualities of student results. It has also generated more sophisticated discussion of learning goals, instructional guidelines, and student artifacts. Most of all, it has enabled faculty to be creatively engaged.

We also recognized some problems: our initial sample was too limited, and the actual scoring ranges on the rubric needed to be revised. Our initial plan for reflective writing was too vague. We needed the reflection piece to be an integral part of the synthesis assignment. This brief excerpt of our experience at VU demonstrates the difference between the idea of assessment as the accountability "ruler" slapped across the knuckles of faculty and assessment valued as an essential, vital process used to learn about our craft and our students.

If faculty ownership is the goal, then the VU English faculty are meeting it. We have ownership of assessment because we accept that learning—ours and our students'—is messy; we have learned to have meaningful collaborative conversations; we have been courageous and allowed ourselves to be vulnerable in order to be authentic; we started small and worked our way to something bigger. It wasn't always fun or easy, but it has always been worthwhile, and some previous dissenters have since recanted once they recognized the result of the work. Our improvements are the result of system-wide change regarding assessment, and change can be painful. However, working to ensure that the three necessary conditions—engaging as a classroom teacher, being supported and supportive, and embracing an ongoing conversation beyond the data—are aligned in the midst of change will engender collegial responsibility of the faculty for the general education curriculum and its learning objectives.

None of the benefits we have identified would have occurred without a commitment by the administration to moving assessment forward with an improvement focus. The earlier accountability focus asked only for evidence that students had success during the semester, but did not engage the faculty in the larger questions about how far they wanted to take student learning. The Department's early assessment work had the stultifying effect of suggesting that everything was "OK," and the process did not invite faculty to engage in conversations that either challenged them or created community based in shared values. On the other hand, no administrator can force a sense of assessment commitment and community. Growing a commitment is a process itself,

one that takes conscious support from administration as a working partner with faculty to develop its own community and the sense that assessment is worth the effort. When grounded in those things that appeal to faculty the most—

their goals for student learning, their commitment to quality, their curiosity about the impact of their efforts, their hope and optimism about the learning process—meaningful assessment is not only possible; it's powerful.

Michael Gress

CONCLUSION

Our work together has been a powerful reminder, on the interpersonal level, of principles at play on the larger fields of our institutions that have contributed to fostering relevant, authentic, and "worthy" assessment practices. In particular, our working group has experienced and recognized the following:

► We have learned to have meaningful collaborative conversations across disciplinary and institutional differences, and we have come to understand how vital this has been for relevant, authentic, and worthy assessment to happen on our campuses.

► We have been courageous in these conversations, allowing ourselves to be vulnerable as a necessary condition of authenticity.

► We started small—as a work group, and as professionals working in assessment on our campuses—and worked toward something bigger.

► We understand how our institutions' improvements in assessment practices are the result of system-wide changes which catalyzed faculty to invest in assessment, which then makes the continuing evolution of assessment approaches possible on the levels of departments, programs, and the institution as a whole.

When we work to ensure that these necessary conditions—engaging as classroom teachers; being supported and supportive at the departmental, programmatic, and institutional level; and embracing an on-going conversation beyond the data—are aligned, we find ourselves

in the midst of our "perfect storm" of assessment, one that surfaces new insights about the impacts of our curriculum on the learning of the students in our particular contexts. In our experience, when this happens, faculty, already deeply invested in the success of their students, become excited about assessment and shape the evolution of evaluative strategies and approaches in a dynamic institutional learning community. With faculty ownership, such a community becomes possible, it has positive impacts for participants at all levels, and it produces assessment that is relevant, authentic, and worthy of a liberal education.

NOTES

1. It is beyond the scope of this article to detail the history and evolution of assessment practices in the Capstone in particular and in University Studies more generally. For more information about these topics, contact Rowanna Carpenter, Assessment Coordinator for University Studies, at carpenterr@pdx.edu. Capstone e-portfolios are stored electronically and may be viewed at http://capstone.unst.pdx.edu/. The University Studies website also has comprehensive information about program-wide assessment efforts; visit http://www.pdx.edu/unst/university-studies-assessment.

2. There are approximately 70 distinct Capstone courses offered each year, with a total number of more than 240 sections (as many Capstones are offered more than one time/term per academic year) engaging more than 3,800 students in community partnerships of various sorts. Class size averages 15-20 students per course. In each year of the current e-portfolio assessment, about 25%, or 18-20, of those distinct courses has been assessed, so that, at the end of the current academic year, all of the distinct Capstone courses will have been assessed over the course of this first four-year cycle.

3. Many institutions use the small group instructional diagnostic tool for collecting mid-term feedback on student learning and experiences of courses, and there are many online sources that provide sample questions for this process.

4. For more information on how the Capstone program structures and conducts the small group instructional diagnostic tool, contact Vicki Reitenauer, vicr@pdx.edu.

5. For more information on how MDC conducts this assessment and analyzes the resulting data, contact John Frederick, jfrederi@mdc.edu, 305.237.7068

6. For more information on the Vincennes University Writing Program assessment, including CQI (continuing quality initiatives for AQIP), contact Joan Puckett at jpuckett@vinu.edu.

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WHY RUBRICS?

Robert W. Strong—St. Edward's University

The title of this piece is a question that is often asked in higher education—though it is, in my experience, rarely asked by those of us that use rubrics consistently in our day-to-day teaching. However, as is the case with many things in life, what is often obvious to people who are familiar with an object or a concept, can be very difficult for those who are unfamiliar with it to see, or worse, understand. Hopefully this brief article about rubrics and their use will be helpful to those unfamiliar with rubrics and who would like to better understand what they are, how they are useful for assessment, and maybe even bring the use of rubrics to their classrooms and programs for evaluation and assessment.

What is a rubric? According to Kist (2001), "Rubrics are tools that formalize the process of evaluation." Zimmaro (2007) provides a bit more detail; for her, a rubric is a "systematic scoring guideline to evaluate students' performance (papers, speeches, problem solutions, portfolios, cases) through the use of a detailed description of performance standards." Zimmaro believes that rubrics should be used to ensure that consistent scores are achieved across all students; further, rubrics "permit students to be more aware of the expectations for performance and consequently improve their performance,…" and contribute greatly in achieving higher awareness of expectations for all students. In the larger scheme of things, using rubrics goes a long way in making sure that students, faculty, institutions, and accreditors all have a way of knowing the purpose of the work that the students are being asked to do.

In the world of capstones, or any higher-order classes that are directly tied to the assessment of an institution's Mission Statement goals and objectives (which many capstones do), the use of rubrics answers several key questions and addresses common concerns of university deans, presidents, and outside accreditors:

> By what criteria should performance be judged?
> Where should you look and what should you look for to judge successful performance?
> What does the range in quality performance look like?
> How do you determine validly, reliably, and fairly what score should be given to a student and what that score means?
> How should the different levels of quality be described and distinguished from one another? (Zimmaro, 2007)

Inside academe, most practitioners have historically been satisfied to accept the grades that students earned as an adequate measure of performance without much regard to how those grades were derived (despite ever increasing complaints about "grade inflation"). Outside accreditors, on the other hand, have historically shown significant reluctance to accept course grades alone as adequate assessment tools for their purposes. However, the significant strengths demonstrated in the use of rubrics in determining a course grade provide the basis for making a strong argument for using course grades in institutional assessment. Rubrics have many strengths that speak directly to the concerns of assessors, particularly outside assessors. The most important strengths of rubrics are that:

> Complex products or behaviors can be examined efficiently.
> Developing a rubric helps to precisely define faculty expectations.
> Well-trained reviewers apply the same criteria and standards.

Rubrics are criterion-referenced, rather than norm-referenced.

Ratings can be done by students to assess their own work, or they can be done by others, e.g., peers, faculty, or even independent evaluators. (Allen, 2008)

If course grades are based completely or predominantly on work products that are evaluated by rubrics, a very strong case can be made to accreditation entities that those grades do in fact represent valid and reliable assessment of the students' level of achievement in a given course or disciplinary field.

Ultimately though, the best arguments for the use of rubrics in evaluating learning are grounded in exactly that: "learning." Andrade (2001), Pierce (2006), and Henning (2012), all argue that rubrics should be used primarily because they support learning, particularly higher order critical thinking (something that is absolutely essential for successful completion of most capstone courses). Henning claims that, "Rubrics encourage students to think about their own thinking and possibly about their own criteria for what is 'good': to analyze their own work and process to see how it matches up with the standard explained in the rubric. By using rubrics, teachers give students experience in their higher-level thinking processes." An additional argument advanced by rubric supporters concerns gains in efficiency for both students and their instructors—for instructors in doing evaluation and for students in understanding what they learned (and what they did not learn).

The literature on rubrics in pedagogy is fairly vast—a sample of that literature is found in the "References" that accompany this article. This brief discussion is in no way exhaustive or comprehensive. And while the overall thrust of this brief review is about the advantages and benefits of using rubrics for evaluation and assessment, there are also some cautions that should be noted. McMullen-Light (2011) argues that if rubrics are too generic and fail to reflect the specific nature of a project or a task, then they lose much of their value as communication and evaluation devices. However, if packed with too many attributes, a rubric will lose much of its value. Nonetheless, McMullen-Light makes a fairly convincing case that "Designing [a rubric] is a really good exercise in prioritizing."

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SAMPLE RUBRICS

Champlain College

Synthesis Assignment—description and rubric
200-level Literature course at Vincennes University (Chapter One)

Senior (Core 9) Integrative "Manifesto"—rubric
Fall semester signature assignment at Saint Joseph's College (Chapter Three)

Senior (Core 10) Interdisciplinary Moral Reasoning Seminar—rubric
Spring semester signature assignment at Saint Joseph's College (Chapter Three)

Senior Capstone—final paper rubric
St. Edward's University (Chapter Three)

Senior Capstone in Visual Arts—partial rubric
Professional and general education outcomes combined—University of Saint Francis (Chapter Four)

Senior Capstone in Interior Design—partial rubric
Liberal Education requirements of the Council for Interior Design Accreditation
North Dakota State University (Chapter Four)

Rubrics are good for evaluating learning,
but even better at encouraging it.

VINCENNES U. LITR 223

Prof. Matt Groneman

What follows is one Vincennes University professor's set of instructions for an integrative assignment in a 200-level literature course. These assignments are intended to address all literature outcomes established by the English faculty, and they are assessed on the basis of the rubric on the next page.

Directions: Write a 6-8 page **Preface** to an anthology of your own creation. An anthology is a collection of different pieces of literature; your textbook is an anthology of American Literature, for instance. You will cull the works for an anthology, arrange them, write up a table of contents (not included in your page count) and then write a preface, explaining why you chose the works that you did for your anthology. (150 points)

Organization: Your anthology may be devised however you choose. Some ideas for you to consider:

- ► Create a regional anthology reflecting the culture of a certain area.
- ► Create an anthology based on a theme: such as pieces of literature that deal with freedom or loneliness.
- ► Create an anthology based on subject matter: such as literature about sports or war.
- ► Organize your selections chronologically: start in past, move to present.
- ► Organize your selections by genre: poetry, drama, fiction.

Table of Contents: Your anthology will include five different works. At least three should come from this class; at least one must come from outside of this class. When considering the work(s) that come from outside of this class, feel free to consider a wide definition of literature. You may wish to include a film script and append a DVD to the anthology, or song lyrics with the song included on a CD that comes with the book. As you discuss the contents in your **Preface**, cite **at least one secondary source** related to one of the texts that originated in this class.

Part 2 of Synthesis Assignment— Reflective Letter

Directions: When you turn in your preface, I want you to turn in a one and a half to two page **reflective letter** (50 points). This letter will account for half of your quiz and journal posting grade. The reflection will be graded on your ability to answer the questions below and meet the minimum standards for grammar and clarity. The reflection will focus on your experience of collecting materials for the anthology and in writing the preface.

Address the following:

- ► What, if anything, did you enjoy about the assignment?
- ► What, if anything, did you dislike about the assignment?
- ► What was your biggest challenge in completing the assignment?
- ► What came to you the easiest?
- ► How did you come up with the theme for your anthology?
- ► How did you go about finding pieces to include in your anthology?
- ► When choosing pieces, how much attention did you pay to how they complemented each other, either through similarities or differences?
- ► Did you find it easier or more difficult to find the piece(s) in your anthology that came from outside of class?

Vincennes University—Rubric for 200-level Synthesis Assignment

	5	4	3	2	1
	EXEMPLARY	PROFICIENT	SUFFICIENT	DEVELOPING	DEFICIENT
Outcome 1					
Employ critical standards and critical thinking in explicating and analyzing literary works.	Student demonstrates comprehensive knowledge of major ideas by clearly explaining concepts (incl. genres, forms, literary devices), incorporating and interpreting relevant and diverse sources, and arriving at logical conclusions informed by incisive analysis of literature.	Student demonstrates skill beyond sufficient level, but not consistently at exemplary level.	Student demonstrates knowledge of main ideas by clearly explaining concepts (incl. genres, forms, literary devices), incorporating and interpreting relevant and diverse sources, and arriving at conclusions informed by an analysis of literature.	Student demonstrates skill beyond deficient level, but not consistently at sufficient level.	Student demonstrates a limited or inadequate knowledge of a few ideas by offering unclear explanations of concepts (incl. genres, forms, literary devices), failing to incorporate or interpret a sufficient number of relevant and diverse source, and arriving at unpersuasive conclusions based on inferior analysis of literature.
Outcome 2					
Evaluate a literary work as a reflection of its own time and culture and as it relates to contemporary life.	Student distinguishes between a complex series of cultural, political, and social relationships to a variety of communities, making insightful connections between the work's era and contemporary life.	Student demonstrates skill beyond sufficient level, but not consistently at exemplary level.	Student identifies an important idea or theme in order to make connections between the meaning and value of a literary work in its own time and in contemporary life.	Student demonstrates skill beyond deficient level, but not consistently at sufficient level.	Student acknowledges the historical period of a given work but cannot articulate how conditions of that time affected the work or how a theme from the work may be connected to contemporary life.
Outcome 3					
Construct meaning by selecting and organizing evidence for a literary argument.	Student synthesizes evidence to imaginatively reveal insightful patterns, differences, similarities, and ideas that take into account the complexities of a written argument about literature.	Student demonstrates skill beyond sufficient level, but not consistently at exemplary level.	Student incorporates evidence to reveal patterns, differences, similarities or ideas in order to devise a written argument about literature.	Student demonstrates skill beyond deficient level, but not consistently at sufficient level.	Student includes examples that are not reflective of patterns or ideas necessary to develop a written argument about literature.
Outcome 4					
Demonstrate interpretative and research skills in written form to create a clear, coherent, and correctly documented paper.	Student utilizes credible sources that are correctly represented and documented, with enough interpretation and evaluation to develop a strong analysis and synthesis.	Student demonstrates skill beyond sufficient level, but not consistently at exemplary level.	Student uses credible sources that are correctly represented and documented in most cases, with enough interpretation and evaluation to develop an adequate analysis.	Student demonstrates skill beyond deficient level, but not consistently at sufficient level.	Student uses questionable sources that are incorrectly represented or documented, with no interpretation or evaluation in the paper.

Core 9 Manifesto Rubric (11/29/12 rev.) Saint Joseph's College (Indiana)

The signature assignment in the first of the two senior year Capstone Courses at Saint Joseph's College is a 25-to-30-page "Manifesto." This is primarily an exercise in integrative thinking, challenging students to reflect on the development of their understanding of "Christian Humanism" as they have progressed through the Core Curriculum the past six semesters. Students are asked to consider what they have come to hold as "basically true" about the world, people, and God and also what they have come to adopt as their most basic values to apply in making their more important life choices in the future.

Criteria	Excellent (A, A-, B+)	Acceptable (B, B-, C+)	Minimal (C, C-, D+)	Unacceptable (D & F)	Criteria	Excellent (A, A-, B+)	Acceptable (B, B-, C+)	Minimal (C, C-, D+)	Unacceptable (D & F)
Integrative	Readings & Lectures are used intelligently. Material from previous Cores and major are correlated and synthesized with Core 9 material.	Readings & Lectures are referenced. Material from previous Cores and major are referenced and used several times.	Only 3-4 readings and lectures are referenced. Material from previous Cores and major are referenced.	Only 1-2 readings and lectures are referenced. Material from previous Cores and major is absent.	Values	What makes personal and communal value commitments humane and/or Christian is clearly understood. Student is clear about the choice of each value over its alternative. Feelings are expressed but play a minimally supportive role to the reasons for choices.	Distinctions between personal, communal, Christian, and human values are understood. Student recognizes alternative values, but is unclear about choice of one or the other. Reasons for value choices are supported primarily by personal feelings.	Little distinction is made between personal, communal, Christian, and human values. Student acknowledges alternative values, but fails to make a choice between values. Personal feelings take precedence over reasons for value choices.	No recognition of differences between personal, communal, Christian, and human values. Student fails to acknowledge alternative values. Reasons for value choices are absent.
Reasoned Discourse	Cogent arguments are provided. Arguments and examples show an accurate understanding of what's known and what's not known. Specialized terminology is consistently used correctly. The paper overall is convincing.	Clear arguments are provided. Arguments and examples reference what is known and not known. Specialized terminology is frequently used correctly. In part, the paper is generally convincing.	Attempts at arguments are provided. Rarely do arguments and examples demonstrate an understanding of what is and what is not known. Specialized terminology is rarely used correctly. The paper rarely includes convincing arguments.	The paper does not include an argument. There is no recognition of what is known and not known. Specialized terminology is generally used incorrectly. Overall, the paper is not convincing.	Language Conventions	Organization of Manifesto is clear. Correct spelling, punctuation, transitional words, references, and grammar contribute to the clarity of the paper.	Organization of Manifest includes introduction, body, and conclusion. Spelling, punctuation, transitional words, references, and grammar generally contribute to the clarity of the paper.	Organization of Manifesto includes an introduction but no clear conclusion. Occasional errors in spelling, punctuation, transitional words, references, and grammar distract from the clarity of the paper.	Manifesto has no clear organization. Numerous errors in spelling, punctuation, transitional words, references, and grammar distract from the clarity of the paper.

Core 10 Research Paper Rubric (Term 122) Saint Joseph's College

Interdisciplinary

Criteria	Excellent (A, A-)	Good (B+, B, B-)	Acceptable (C+, C, C-)	Unacceptable (D, F)
Use of Multiple Disciplines	Effective and thorough use of multiple (3+) disciplines in addition to ethics	Effective and thorough use of 2 disciplines in addition to ethics	Multiple disciplines and ethics are included but not balanced; one or more areas only presented superficially	Presentation of ethics is minimal or absent; only one discipline
Relevance to Topic	Demonstrates specific and clear relevance of disciplines to topic	Demonstrates general relevance of disciplines to topic	Connection to topic not clear for some disciplines; although some are relevant	Disciplines seem unrelated to topic; minimal effort made in showing relevance
Support for Thesis	Synthesizes disciplines to support thesis	Attempts to synthesize all disciplines to support thesis	Support for thesis not present in all disciplines	Support for thesis not present in most disciplines

Moral Reasoning

Use and analysis of Moral Principles	Grounds position in explicit moral principles	Grounds position in moral principles	Attempts to connect position to moral principles	Position not grounded in moral principles
Understanding of Christian Humanism	Demonstrates a clear understanding of the relevant principles of Christian Humanism	Demonstrates a general understanding of relevant Christian Humanist principles.	Includes principles of Christian Humanism and attempts to connect to thesis at a beginning level.	Christian Humanism is either absent or inaccurate.
Personal Commitment	Clearly follows from moral principles	Expressed support in relation to moral principles	Included but not connected to moral principles	Absent or superficial in presentation
Analysis of Opposing Arguments	Effectively presents and concisely analyzes opposing arguments	Presents and analyzes opposing arguments	Presents opposing arguments with beginning levels of analysis	Little or no analysis of opposing arguments

Research

Sources	Effectively employs excellent and appropriate scholarly sources	Uses appropriate sources	Uses some sources of questionable scholarly value	Uses sources that are inappropriate for assignment
Understanding of Sources	Demonstrates critical understanding of sources	Demonstrates a general understanding of sources	Demonstrates a general understanding for most sources	Sources are not applied effectively; shows a lack of understanding
Use of Sources	Effectively incorporates sources to provide evidence and support	Generally incorporates sources to provide evidence and support	Some statements that need evidence are not supported	Neglects to use sources where necessary
Format	Quotations and references in proper format, no errors	Quotations and references in proper format, few errors	Quotations and references mostly in proper format, several errors	Multiple errors in quotations and references

Writing Skills

Thesis	Clearly written and aids in organizations	Clearly written and evident	Difficult for the reader to find, but present	Appears to be absent or inconsistent throughout paper
Organization	Uses a logical structure; critical connections and transitions are evident; logical and concise summary	Clear with consistent focus; logical connections and transitions	Mostly clear; connections and transitions are not smooth.	Difficult to follow; lacks a central idea
Language	Clear and precise; sentences display consistently strong, varied structure	Lacks clarity or includes the use of some jargon or conversational tone	Consistently lacks clarity, sentence structure may be wordy, unfocused, repetitive or confusing	Reader is unable to understand main points in paper due to lack of clarity in language
Punctuation and Grammar	Rules of grammar, usage, and punctuation are followed; spelling is correct	Paper contains few grammatical, punctuation, and spelling errors	Paper contains several grammatical, punctuation, and spelling errors	Paper contains numerous grammatical, punctuation, and spelling errors

2-7-12

ORAL COMMUNICATION FORMAT
CAPSTONE FINAL PAPER EVALUATION FORM
St. Edward's University, Austin, Texas

STUDENT: _____ **SECTION #:** _____ **DATE:** _____

CONTENT COMPONENTS

COMPONENT	*RANGE*	*DESCRIPTION*	*SCORE*
INTRODUCTION (Intro to controversy, documentation of social problem(s), definitions, and scope)	5 4.5 4 3.5 3-0	Excellent Very Good Good Average Poor	_____
BACKGROUND/HISTORY	10 9 8 7 6-0	Excellent Very Good Good Average Poor	_____
PRESENTATION OF CASES (Positions, parties, issues, arguments and supporting evidence for each position)	20 18 16 14 12-0	Excellent Very Good Good Average Poor	_____
CRITICAL ANALYSIS OF ARGUMENTS AND SUPPORTING EVIDENCE (Strengths and weaknesses for each side's case)	10 9 8 7 6-0	Excellent Very Good Good Average Poor	_____
MORAL REASONING ANALYSIS (Obligations, values, consequences, and normative principles)	10 9 8 7 6-0	Excellent Very Good Good Average Poor	_____
CONCLUSION (Including interview summary; civic engagement summary; answer to topic question defended with argumentation, moral reasoning, AND feasibility)	10 9 8 7 6-0	Excellent Very Good Good Average Poor	_____
WORKS CITED (Quality and Range of Sources)	5 4.5 4 3.5 3-0	Excellent Very Good Good Average Poor	_____

Total Score for Content (of a possible 70 pts): _____

Total Score for Form (up to 30 pts. from reverse side): _____

VISUAL ARTS STANDARDS *and* GENERAL EDUCATION OUTCOMES

Elizabeth Kuebler–Wolf—University of Saint Francis

The School of Creative Arts at USF (Fort Wayne, Indiana) has achieved program accreditation by the National Association of Schools of Art and Design. Thus, this School's essential learning outcomes are based on NASAD standards and were developed separately from the General Education outcomes and requirements of the University. Nevertheless, there is substantial overlap between the two sources of outcomes that makes possible the invention of a senior capstone that attends to both professional competence and University-specific goals.

The following table presents an example from a capstone course for the Visual Arts that integrates some of the local/internal General Education outcomes of USF with some national/external standards of the program accreditors.

School of Creative Arts Program Goals (NASAD standards)	USF General Education Learning Outcomes in Capstone, with artifacts designated to demonstrate outcome
• Demonstrate technical skills in major area of concentration. • Demonstrate the ability to work independently and develop expertise in their chosen concentration	• Demonstrate competence in applying current and emerging technologies **Learning Outcome #15:** Integrate changes in technology within their discipline. **ARTIFACT** – Senior Project Proposal
• Make workable connections between concept and media.	**Learning Outcome # 9**: Write clearly and logically **ARTIFACT** – Artist Statement, Cover Letter and Resume
• Develop an artistic maturity and sensitivity to visual aesthetics. • Utilize the principles of visual art and design. • Achieve basic visual communication and expression in one or more media. • Evaluate the nature of contemporary thinking on art and design.	• Goal Think analytically, synthetically, critically, and creatively in the pursuit of knowledge **Learning Outcome # 21**: Demonstrate creativity and leadership in developing and framing problems and effective solutions and applications. **ARTIFACT** – Senior Project Proposal
• University Standard (Not a NASAD standard);-Because a core mission of the university is to educate students in the Franciscan tradition, student artifacts from the freshman seminar course (iConnect) and the capstone are evaluated every year by the university's assessment team.	• Appreciate the spiritual dimension of life and be conscious of one's own religious perspective within a community context **Learning Outcome # 27**: Demonstrate literacy in Franciscan values and traditions **Learning Outcome # 28**: Examine personal, professional and communal choices and actions from a moral perspective. **ARTIFACT** – Reflection Paper

Reference: National Association of Schools of Art and Design. *NASAD Standards/HB*. http://nasad.arts-accredit.org/index.jsp?page=Standards-Handbook.

INTERIOR DESIGN STANDARDS *and* INSTITUTIONAL CAPSTONE OUTCOMES

Susan Ray–Degges—North Dakota State University

An interior design program, accredited through the Council for Interior Design Accreditation (CIDA), "must provide a balance between the broad cultural aspect of education (liberal arts and sciences), on the one hand, and the specialized practical content integral to the profession, on the other" (CIDA, 2011, 11-2). Professional standards for an interior design program require specific student learning experiences that "provide academic preparation for the professional interior designer. This preparation is the first component of a recommended sequence including formal education, entry-level experience, and satisfactory completion of a qualifying examination" (CIDA, 2011, 11-30).

Interior design assessment includes a broad set of indicators including global perspectives, human behavior, design process, collaboration, communication, professionalism, business practice, core design, and technical knowledge. Programmatic outcome indicators can be interwoven with institutional outcomes in the program's capstone experience to create a comprehensive measure of student learning, resulting in rich assessment data.

Standard 2. Global Perspective for Design
Entry-level interior designers have a global view and weigh design decisions within the parameters of ecological, socio-economic, and cultural contexts.

Student Learning Expectations
Student work demonstrates *understanding* of:
   a) the concepts, principles, and theories of sustainability as they pertain to building methods, materials, systems, and occupants.

Students *understand:*
   b) the implications of conducting the practice of design within a world context.
   c) how design needs may vary for a range of socio-economic stakeholders.

Program Expectations
The interior design program provides:
   d) exposure to contemporary issues (social, political, economic, ecological) affecting interior design.
   e) exposure to a variety of business, organizational, and familial structures.
   f) opportunities for developing knowledge of other cultures.

Program and student learning expectations for each of sixteen standards are assessed in terms of compliance, partial compliance, and non-compliance.

CAPSTONES *with a* MISSION

Cory Lock and Robert Strong—St. Edward's University
Jeffrey Kirch, Michael Malone, and John Nichols—Saint Joseph's College

Two institutions in this project—St. Edward's University in Austin, Texas and Saint Joseph's College in Rensselaer, Indiana—conduct senior year Capstones that assess student learning outcomes derived from institutional Mission. These outcomes are defined in rubrics for evaluating the Capstone Course assignments, and so the rubrics function as what AAC&U calls "Compasses" for guiding students as they journey toward graduation. The metaphor is particularly apt at these two institutions, because their rubric "Compasses" indeed guide students along a Pathway of some 45 to 57 semester hours of general education courses spread throughout every semester of the student's undergraduate career.

The Institutions and their Curricula

Saint Joseph's College and St. Edward's University are independent, Catholic, liberal arts institutions that conduct senior-level assessment in a general education Capstone Course. Their approaches to the Capstone Course differ significantly from those institutions offering capstones in the majors. Rather than showcasing expertise in a particular field, these general education capstones intentionally crown the students' liberal education. Essentially involved in these particular Capstones are their respective institutional Missions and an emphasis on intellectual skills designed to develop the student as a whole person and lifelong learner. Mission and institutional heritage are thus paramount to the two general education Capstone Courses profiled here.

Both institutions approach the Capstone Course as a site for students to refine and demonstrate Mission-derived learning outcomes. Founded in 1889 by the Missionaries of the Precious Blood in Rensselaer, Indiana, Saint Joseph's College serves approximately 1100 undergraduates. Its Mission Statement explicitly emphasizes the College's pledge to "excellence in liberal education as a united endeavor of intelligence and faith." Moreover, the College summarizes its vision of its graduating students as "competent professionals, capable of assuming leadership roles in the world, who will embody Gospel values in their personal lives and professional careers." Saint Joseph's College specifically prioritizes the "Christian Humanist values of justice and love" and "commitment to human solidarity and interdependence on national and global levels."

St. Edward's University, founded in 1885 by the Congregation of Holy Cross, is a master's-granting institution located in Austin, Texas, which serves over 5300 students, more than 3600 of whom are traditional undergraduates. Its Mission Statement approaches learning as a "lifelong process" and specifies the aim of developing "independent and productive" graduates. Individuals are encouraged "to confront the

critical issues of society and to seek justice and peace." Further, "Students are helped to understand themselves, clarify their personal values, and recognize their responsibility to the world community."

Notable in both mission statements are shared commitments to critical values clarification, development of moral reasoning, and the promotion of social justice, as well as an emphasis on the responsibility of humans to act in solidarity to improve the world around them. Although Saint Joseph's College and St. Edward's University are both Catholic institutions, their approach to the Capstone Course as the culmination of a multifaceted liberal education is appropriate for any institution approaching education in the classical understanding of liberal education as broad-based development of all the capabilities of the mind itself.

At the end of the general education program at both institutions are the Capstone Courses, where students demonstrate their mastery of the essential learning outcomes of the general education program as a whole. The Capstones thus serve as summative performances of the students' four-year general education experience. Both institutions regard general education as the heart of liberal learning and the common site where values and learning objectives from the Mission are directly addressed. For each institution, a four-year general education curriculum of required, interdisciplinary core courses serves as a "Pathway" to the Capstone. The Capstone, or more accurately its rubric used for assessment of student work, in turn serves as the "Compass" to guide student learning along this curricular course of learning. The Pathway and the Compass help develop a community of learners through shared educational experiences. They also provide students with the requisite skills to achieve the mission-driven general education outcomes.

In four-year general education programs, the capstone rubric serves as the "Compass" to guide student learning all the way to graduation.

COMPASS
Mission-Derived
Capstone
↑
COMMUNITY OF LEARNERS
Students participate in common discourse and shared learning experiences
↑
PATHWAY
Four-Year, Core Curriculum

St. Edward's University and Saint Joseph's College share many of the same learning outcomes. These include the development of written and oral communication skills, information literacy and research skills, moral reasoning and value formation, critical thinking, and interdisciplinary and synthesizing skills. Both institutions also emphasize an international perspective, encourage students to attend to the history and current controversies of the world, and assist students in considering how they can assume leadership roles in transforming it. These outcomes define the nature of liberal education for both institutions and are congruent with and follow from their similar missions.

The Pathway: Core Curriculum

General education at Saint Joseph's College consists of forty-five credit hours distributed as ten required courses that span all four years of the undergraduate experience. The students meet as a whole class (freshman, sophomore, etc.) for lectures and other presentations for the first seven semesters, with smaller group (16-18 students) sessions for shared discussions and activities related to course material. The content of the core courses includes elements from the humanities, natural sciences, social sciences, and intercultural studies. The first four semesters are chronologically organized into an integrated and interdisciplinary study of the course of development of Western Civilization. In the junior year there are concurrent ventures into intercultural studies and into a synthesizing investigation of cosmic,

biological, and cultural evolution. The senior year offers two successive capstone challenges: in the first, the students create their own "Christian Humanist Manifesto," a synthesis of the fundamental beliefs and the basic values that they have adopted in the previous three years; the second, a seminar in format, challenges students to research a contemporary social or moral issue and to present their results orally and in writing.

General education at St. Edward's University consists of fifty-seven hours, thirty hours of courses offered in a relatively cafeteria-style curriculum, and twenty-seven offered in a core consisting of Freshman Studies, Cultural Foundations, and the Capstone. Offered in the mostly cafeteria format are courses in math, science, communication, foreign language, religion, and philosophy. The core curriculum at St. Edward's University begins with Freshman Studies, which is divided into two parts, a three-hour team-taught lecture course that introduces students to the liberal arts through an interdisciplinary topic—some examples would be science and theology, ecology and the environment, China, and the U.S./Mexico border—and a smaller three-hour Rhetoric and Composition class where students write about and discuss the themes of the lectures. The eighteen-hour requirement in Cultural Foundations includes interdisciplinary classes drawn from such areas as literature, the fine arts, sociology, history, economics, political science, and cultural studies. Specifically, the American Dilemmas course, in which students investigate American social problems and inequalities, prepares students for the Capstone Course by having them perform independent research on a contemporary social problem and then consider policy approaches to solving it from the points of view of both arguments and values. The entire fifty-seven-hour general education curriculum is scaffolded, so that students build skills in key, mission-derived competencies, then hone these competencies in the Capstone Course.

The Compass: Capstone Rubrics

At St. Edward's University all undergraduates complete the senior-level Capstone Course, except honors students who instead produce a thesis project. While New College adult learner students also complete a capstone project, they do so under their own distinct guidelines. In the traditional undergraduate capstone, students showcase skills they have developed throughout their college careers, including library and field research, written and oral communication, critical thinking, and moral reasoning. Faculty guide students through their semester-long projects in multiple stages. First, students produce an annotated bibliography and topic analysis form for their investigation of a current, controversial, policy-based social issue. Next, they describe the results of their library research, which must involve at least twenty-five authoritative sources, in both a paper and an oral presentation. In another paper, students analyze both the argumentation and moral reasoning of the stakeholders involved in the debate they have investigated and propose a solution to the controversy. They then test this solution by interviewing in-person two people with expertise related to the controversy, conduct a civic engagement activity, and present these results in a second oral presentation. Finally, students produce a summative twenty- to thirty-five-page paper by combining and revising their previous written work and taking a final stance on the controversy.

The double capstone arrangement at Saint Joseph's College is designed to bring to a climax the integrative and interdisciplinary commitments of the Core Curriculum. The first of these, in the fall of the senior year, has as its signature assignment the writing of the student's own "Christian Humanist Manifesto." The emphasis here is on integration: students are challenged to pull together from their College experience their fundamental beliefs about the world, other people, and God, while at the same time identifying the fundamental values to which they intend to appeal to make decisions now and later on in life. In the second semester of their senior year, the final semester of Core, students have a research seminar course that is an exercise in applied and interdisciplinary learning. They select a contemporary issue, often linked to their major, do the research, and present orally and in writing the stand they take on the issue, after careful research and reflection that also makes use of their previous "Manifesto."

The rubrics used in the Capstone Courses at St. Edward's and Saint Joseph's, as described in the two preceding paragraphs, were presented in Chapter Two.

Assessment in the Capstone Course

Saint Joseph's College and St. Edward's University use relatively structured capstone projects to demonstrate student achievement of Mission-derived essential learning outcomes. Specifically, the faculty at each institution use their own common rubric to assess the Capstone assignments. These common rubrics are dynamic; they are continually modified and normed by the Core faculty who teach the Capstone and by the Core faculty as a whole who teach in the general education program. All the general education faculty members have an interest in these Capstone rubrics, for they also function as guidelines for the general education courses in the Pathway to the senior year. For both institutions, the rubrics constitute the basis for the validity of the Capstone assessments, because the essential learning outcomes from the entire general education program are written into these rubrics. Because the Capstone Course is Mission-driven at both institutions, these Capstone outcomes closely resemble the common learning outcomes for the institution as a whole. Also essential to the quality of the Capstone assessment is achieving reliability through constant fine-tuning of the rubrics and norming of the grading process.

At Saint Joseph's College the Capstone faculty keep educating themselves every year in the use of the rubric, and scores from all papers are collected and reviewed. Additionally, a sample of Capstone papers from every section is periodically collected and blind reviewed by a broader team of faculty during the summer.

At St. Edward's between one and three papers from each Capstone section are blind read by experienced faculty every semester. Faculty also participate in an annual workshop where revisions to the course and rubric are discussed. Professional development seminars for Capstone faculty on such topics as argumentation and moral reasoning pedagogy are offered throughout the year.

Comparisons

Although the capstones for both institutions are very similar, there are important differences. The Capstone Course at St. Edward's contains a civic engagement component that Saint Joseph's lacks. During the process of completing their projects, St. Edward's students interview two experts on the debate. Moreover, students carry out a concrete action in support of their final position, a fitting climax to the social justice commitment of the University. Such civic engagement activities include volunteer-

ing, attending marches, circulating petitions, and giving presentations. Neither of the Saint Joseph's senior Core courses has such an action requirement.

Another difference is that the final seminars at Saint Joseph's have themes, for example, Sports Ethics, The Digital Dilemma, Ethics in Communication, Christianity and Public Life, among others, and part of the course involves faculty providing instruction on these themes, in addition to guiding individual students in their research and critiquing their organization of the final paper and presentation. Many of the Capstone Courses at St. Edwards are not themed, but instead are offered as "open topic" sections. Others do have specific major- or topic-related themes, such as Sociology, Psychology, Religion, the Environment, and Global Issues. However, both open and specific topic sections are devoted entirely to the preparation and production of the final student paper and presentation.

Saint Joseph's College

As far as student performances are concerned, the research paper for Saint Edward's is highly structured with a strict developmental sequence of required components. The paper for Saint Joseph's is more open-ended and less structured. The assessment of the oral presentations is also different. The faculty at both institutions employ or are developing common local rubrics to assess the student oral presentations. In addition, at Saint Joseph's College a panel of outside observers from the local community independently assesses about half of the student presentations each year using the faculty's rubric.

Analysis

Faculty at both institutions have recognized some accountability factors as vital to supporting a general education capstone. The first of these is important to assessment in all types of capstones and, in fact, to assessment in general. Faculty must learn from the assessment. In the case of these institutions, this means carefully examining the rubrics and the information they gather. Initially, the faculty must ensure the information the rubric gathers is meaningful. Are the rubric's key areas of assessment truly tied to course outcomes and are they, in the case of general education capstones, Mission-derived learning outcomes? Do they comprehensively address all the learning outcomes the faculty wishes to assess? Second, some sort of periodic review and use of the data must be built into the assessment process. St. Edward's University created the General Education Advisory Committee for this purpose. In it, faculty representatives from all the University's Schools review on a rotating basis the general education courses, their learning outcomes, and their assessment results and then provide recommendations to course directors. The directors of the general education courses also meet on a regular basis to examine and refine the curriculum. With such consistent application of assessment results, the process becomes an opportunity for continu-

Where institutional Mission is a primary concern, the general education capstone becomes a singularly important course.

ous quality improvement, rather than simply a requirement imposed by outside accreditors.

There are also program-wide elements that are specifically required of the general education Capstone Course. First, since this form of capstone is cumulative in nature, it necessarily requires that students be prepared for this final course. Key skills and proficiencies to be demonstrated in the capstone must be introduced early in the Pathway. For example, at Saint Joseph's College, the final Core class requires the best moral reasoning students can muster. From assessments of the Capstone, the faculty learned that this proficiency was not being demonstrated at the level desired. So, additional mandated assignments in moral reasoning were built into lower level Core classes: assignments in the sophomore year in connection with study of Aristotle's *Ethics* and Aquinas's natural law philosophy and a junior level exercise dealing with the ethics in sustainability issues. Likewise, the course directors at St. Edward's University are currently engaged in a curriculum-mapping project in which general education courses' learning outcomes are charted on a series of matrices. The matrices are used to identify gaps and weaknesses in the curriculum and then to guide revisions accordingly. A survey that asked Capstone faculty to identify what skills students most need to do well in their research has also been useful in identifying opportunities for curriculum revision.

Faculty development is a second important programmatic element for the general education Capstone. Most faculty are trained for proficiency in narrow, discipline-specific fields, but general education capstones call for a distinctively interdisciplinary approach. Faculty development is essential, so that the faculty of the Capstone are sufficiently prepared to develop and assess students' integration of a wide and diverse body of knowledge. For example, at Saint Joseph's College, a mass communications professor could be leading a final Core seminar in which students are taking moral stands on issues ranging from bio-science to year-round primary education. Different skills are needed to negotiate those types of divides, as com-

pared to intra-discipline issues. Regular spring and summer faculty workshops are offered to enhance the faculty's own interdisciplinary skills. Likewise, the St. Edward's University capstone program regularly offers professional development seminars for Capstone faculty on topics such as argumentation, moral reasoning, and written and oral communication.

Thirdly, in curricular frameworks such as these there is always a tension between *structure and creativity*. Structured components of the core curriculum and of the capstone courses themselves ensure that key student learning outcomes are addressed, yet these constraints can also diminish both student and faculty freedom. More than St. Edward's University, Saint Joseph's has fairly rigid structures for the pedagogical methods of lecture and discussion, as well as in the overall flow of the four-year core experience. The structure is necessary since Core is meant to be a four-year, integrative experience. Yet, of course some see this as a damper on the individual creativity of the professor. St. Edward's University has a looser core, which nonetheless contains some structured components that can inhibit faculty freedom in designing courses. Its Capstone assignment is more highly structured than that of Saint Joseph's College, requiring students to follow a template in order to ensure required components are addressed in the 20- to 35-page papers that are regularly reviewed by outside readers. This works relatively well with most students, but those who excel in writing may find the

imposed structure stifling. There is an opportunity at both institutions to develop more creative delivery methods that achieve the same overall goal as the traditional formats.

Strengths

The primary strength of the general education Capstone Course here is that it is *Mission-driven*. An independent institution's Mission is fundamentally its reason for existence, its *raison d'être*. The Capstone Course provides an opportunity both to deliver the Mission and at the same time to assess that delivery. Saint Joseph's College "pledges itself to a tradition of excellence in liberal education as a united endeavor of intelligence and faith." This united endeavor is presented throughout the four years of the Core Curriculum as "Christian Humanism." In the double-capstone climax of Core, students are expected to integrate the worldview of Christian Humanism with specific knowledge from their majors. That leads to the application of this united endeavor, the praxis of Christian Humanism, in the final seminar. The close connection between the Capstones and the Mission of the institution assures that the general education curriculum stays Mission-focused.

Likewise, because the St. Edward's University Mission Statement calls on graduates "to confront the critical issues of society and to seek justice and peace," controversial social issues are the main focus of the Capstone Course, no matter what the student's major. Because of the University's emphasis on "the obliga-

Cory Lock, Robert Strong, and Mike Malone

tion of all people to pursue a more just world," the Capstone both develops the critical thinking and moral reasoning skills needed to solve problems and requires expert interviews and a civic engagement activity to emphasize the importance of dialogue and action, in addition to research and analysis alone. In the rubric for the Capstone paper outcomes such as critical thinking, moral reasoning, and civic engagement are directly assessed.

A second strength of both Saint Joseph's College's and St. Edward's University's Capstones is highlighted in the Pathway to Community to Compass structure discussed above. There is a distinct core curriculum *Pathway,* guided by a Capstone *Compass* that all students follow, and this common educational program builds *Community.* The Pathway and Compass have room for differentiation of treatment within individual courses, based on the professor's expertise and creativity, but the overall program is a shared commitment, with the commitment to structures that commonality implies. With common goals and even shared difficulties, students and faculty together are able to form a true *collegio* and the institutions thus offer truly signature forms of undergraduate education.

Both institutions also recognize the commitment their respective faculties have made to the curriculum and its Capstones. As opposed to only teaching departmental courses, the faculties have committed to teaching in the core general education programs. At Saint Joseph's faculty members are assigned to teach both in the Core and in a regular Department. In St. Edward's University, however, the University Program's (general education) faculty is distinct from the faculties in the major and disciplinary departments. Which situation, combined or separate workloads, breeds better commitment, better scholarship, and better fulfillment on the part of faculty members is an ongoing topic of analysis at the two institutions.

Students at Saint Joseph's College and St. Edward's University experience a transformative experience through the general education

Capstones, and the careful construction and use of the rubrics for these courses capture these experiences. Personal growth often takes place through the clarification of the students' own personal commitments and values, followed by the emphasis at both institutions on application of learning to contemporary issues. At Saint Joseph's College, students are expected to make an ethical commitment. St. Edward's includes problem solving and civic engagement components in their Capstone requirements. Such ethical engagement, in its varying forms at the two institutions, helps students understand how to apply their education to our diverse world and in many documented cases can indeed constitute a life-changing event.

Saint Joseph's College and St. Edward's University have developed Capstones with rubrics that serve as Compasses for liberal education and student learning. They have developed true core curricula extended over four years that provide a Pathway toward student success in the Capstone. The Capstones themselves measure the essential outcomes envisioned for literally all students at the institutions, outcomes that are closely tied to their Missions. A major strength of this form of general education Capstone is that the course, its outcomes, and its assessment are overtly tied to Mission-generated goals. The Capstone assignments are authentic assessments (being based on students doing the real work of the Core) and worthy of liberal learning at its highest undergraduate levels (linking as they do the students' culminating work with the best assessments faculty can do), both due ultimately to the Capstone's connection with institutional Mission.

Fr. JeffreyKirch

WEDDING GENERAL *and* PROFESSIONAL EDUCATION OUTCOMES *in* MAJOR-SPECIFIC CAPSTONES

Elizabeth Kuebler-Wolf and Matthew Smith—University of Saint Francis
Craig Pepin—Champlain College
Joan Hawthorne and Thomas Steen—University of North Dakota
Larry Peterson and Susan Ray-Degges—North Dakota State University

Introduction

Senior capstone courses provide excellent opportunities for evaluating cumulative student learning. As culminating experiences, capstones help students integrate learning from within and without their disciplines, encourage self-directed projects and, especially in professional programs, help the final transition to jobs and careers. Many capstones are discipline or program specific, and therefore tend to focus on disciplinary knowledge and skills. However, capstones can also be logical sites to integrate and assess student achievement in general education outcomes as well.

Assessing general education skills and dispositions in program specific capstones provides a number of opportunities. Because general education is often "frontloaded," either intentionally through curriculum design or unintentionally through student choice in the first two years of a baccalaureate degree, the chances to assess general education outcomes through courses near the end point of a student's career can be harder to find.

A bifurcated approach can further deepen the perceived division between general education and the specialized training of disciplines and, in particular, professional programs. This

apparent (but not actual) divide has seen steady convergence in recent years, through the rise of interdisciplinary and integrative programs and courses, through the increased willingness of liberal arts faculty to look for connections between liberal learning and preparation for post-graduation employment, and through the increasing recognition of employers and professional accrediting agencies of the importance of general education outcomes such as communication, critical and analytical thinking and diversity awareness, for the success of college graduates in the workplace.

Moreover, locating general education assessment in program specific capstones also aligns with the goal of authentic, deep assessment. One approach to direct assessment of general education looks to outside instruments such as Collegiate Learning Assessment (CLA) or Collegiate Assessment of Academic Proficiency (CAAP). Such instruments may provide statistically rigorous evidence, but often fail to capture students' true abilities for a variety of reasons. Because capstones often require significant, detailed work products that are self-directed or offer a great deal of latitude in student design, they are more likely to be intrinsically motivational and thus gener-

Champlain College

ate students' "best work." This provides truly authentic evidence with which to assess a much larger range of professional and general education outcomes.

The challenge for assessing general education outcomes in program-specific capstones also stems from their strengths—because they are designed to address specific program outcomes and prepare students for particular professional fields, they can be very diverse in design. Can comparable evidence for institutional outcomes be generated out of such diverse course experiences and assignments? Moreover, can program faculty be convinced that assessment of general education outcomes is important enough to merit inclusion in "their" capstones?

This chapter examines the opportunities and challenges of assessing general education outcomes in program specific capstones, illustrated with the diverse approaches of four very different colleges and universities. The different paths taken by each institution demonstrate there are many possible approaches to this form of assessment, and highlight the many benefits, both direct and indirect. (The reader will recall that two examples of these "weddings," one for visual arts and one for interior design, were included among the rubric samples in Chapter Two.)

HOW WE GOT HERE:

THE DEVELOPMENT *of* GENERAL EDUCATION ASSESSMENT *in* PROGRAM-SPECIFIC CAPSTONES *at* FOUR INSTITUTIONS

Capstone courses, as an example of a culminating senior experience, have been considered a high impact practice for at least thirty years, and have been in place in a number of colleges and universities in the form of senior theses, internships and the like for considerably longer than that. However, their development at individual campuses strongly influences the ways in which they can be used to assess general education outcomes. In some cases, existing specialized capstones have been adapted or retrofitted for general education assessment, while in others, entirely new program-specific capstone courses were created that incorporated elements of general education at the moment of their inception.

University of Saint Francis— Fort Wayne, Indiana

The University of Saint Francis (USF) launched a revised general education curriculum in fall 2007. One version of the early curriculum proposed the capstone as a freestanding course to bookend the first-year seminar (iConnect). However, USF's programs include a large number of professional programs that, because of accreditation requirements, have little flexibility in hour requirements. So, the general education committee embedded four of the new general education outcomes in the program capstones.

This melding of professional and general education outcomes in the capstone presents challenges for individual programs. However, because general education and professional outcomes tended to have some alignment, the new

capstone courses, proposed and taught by each program, were tailored to wed both professional and liberal education preparation. The four general education outcomes for capstones are: 1) write clearly and logically, 2) exhibit creativity and leadership in problem solving, 3) demonstrate literacy in Franciscan values and traditions, and 4) examine personal, professional, and communal choices and actions from a moral perspective. These four outcomes, with the exception of Franciscan literacy, mirror outcomes required by many professional accreditors.

USF's previous general education curriculum incorporated little or no assessment and the institution was interested in assessing and continually improving this new curriculum. Following the larger plan for general education, USF assesses general education outcomes in the capstone indirectly, through specific questions on individual course student evaluations, and directly, through course specific assignments turned in to the Office of Institutional Research and Effectiveness at the end of each semester. These assignments can range from research papers to case studies, performances, and other types of artifacts.

Champlain College— Burlington, Vermont

A professionally-oriented baccalaureate institution, Champlain launched a new general education curriculum in 2007. Instead of distribution requirements, they opted for an interdisciplin-

ary core curriculum approach, a forty-one credit sequence required of all students regardless of professional program. Included as part of this model was a five-credit senior capstone, embedded in the professional programs, but team taught by faculty from the program and from the new Core Division (where all general education faculty, regardless of discipline, now reside). To emphasize the unique nature of these courses, they were given a specific catalog designation that was neither general education nor program specific: College Capstone Course or CCC. With the program being phased in over four years, capstones were taught for the first time starting in Fall 2010.

The concept behind this particular implementation of team teaching, was to encourage students to understand general education and professional training as integrated elements of a unified whole. Team teaching would model integrative learning in the classroom and bring together two of the constituent elements of the Champlain experience. Students engage in an in-depth professional experience that might include internships, consultancy, or the creation of a major professional work product. Along the way, cooperation between the two faculty would illustrate for students the extent to which their professional training is informed by their liberal education, and vice versa.

> The capstone course in a professional major may be the course among all courses where student motivation is at its most intense.

With the Core Division faculty embedded in the program specific capstones, the assessment of general education outcomes in the capstones follows the same system used for assessment in the preceding Core courses. Two assignments based on common learning outcomes and rubrics (one examines ethical awareness; the other integrative thinking, metacognition and writing) are adapted by the faculty teams in each course to the specific conditions and requirements of the course. Resulting student artifacts are collected through an electronic portfolio system, and scored by course faculty during the semester.

North Dakota State University— Fargo, North Dakota

As part of its 1992 general education revision, North Dakota State University included a requirement for a capstone experience integrated into each major. Because there was only a very loose set of university general education requirements prior to 1992, the revision was a major step forward. Like many land-grant universities, NDSU has a history of strong and autonomous deans, especially in agriculture and engineering who wanted to retain their colleges' control over all aspects of the curriculum.

The capstone requirement was embedded in the majors as part of a political compromise with the professional majors, especially engineering, where a significant percentage of NDSU students were, and are, enrolled. Furthermore, many professional programs resisted additional general education credits because their accreditation mandated a large number of credits within their major or program and because many already had senior projects as a program requirement.

After the change was adopted, the campus held informational capstone sessions and brought sociologist Theodore Wagenaar to campus because of his research on capstone assessments. The first capstones were offered in 1996. Because each major defines its capstone experience, they vary from a one-credit seminar to a sixty-credit internship. Three-credit senior seminars are the most common.

Since 1996 NDSU has relied on departments to assess their general education courses as part of their annual assessment of the major. As might be expected, some departments do this more effectively than others. The campus also administered the CLA in 2007, 2009, and 2011 to random samples of freshman, sophomores and seniors to have a nationally-normed, performance-based assessment of student learning.

University of North Dakota— Grand Forks, North Dakota

Capstone courses as part of general education began at the University of North Dakota in 2008 with the implementation of the new

"Essential Studies" program. Essential Studies was the result of UND's revision of the campus general education program, which was designed to increase student learning, make teaching more intentional, and refocus the curriculum so that students' general education extended across the entire undergraduate experience. To address that last objective, UND established a new general education requirement that each student take a capstone in Essential Studies as they complete their degree work in their senior year.

Academic units had three options in developing the capstone courses. One, chosen most often, was to revise an existing upper level course to meet the Essential Studies capstone criteria, which had been developed by a faculty group and approved by the campus Essential Studies Committee. A second option was for the unit to create a new course, designed to help their students meet the capstone course requirement. The third option was for the unit to identify a capstone that is appropriate for their students, but which is offered by a different unit. Units

choosing this option use the advising process to specify or recommend their capstone choices. This third option was supported by the development of several interdisciplinary capstones that are open to all students regardless of their major.

To date, UND has over fifty approved Essential Studies capstone courses, and this makes it possible for all graduating students to find an appropriate capstone to meet their requirements. Each capstone is designed as a culminating learning experience that bridges students' work in their majors and in Essential Studies.

In addition, the capstones are designed to serve as venues for Essential Studies program assessment. Student work products from the capstone courses are used in two ways. First, course-level assessment of the artifacts indicates to academic units (and individual instructors) what their students have learned in their major programs of study and in their work in general education. Second, an institution-level scoring indicates to the faculty and administrators across the university where the general education program needs to go next.

University of North Dakota

PLANNING *for* ASSESSMENT *of* GENERAL EDUCATION *within a* DISCIPLINE-SPECIFIC CAPSTONE

In these four institutions, there are two general categories of approaches that may be particularly applicable to direct assessment of general education learning outcomes within a discipline-specific capstone course. First, student work products generated within program-specific capstones can be included in an institution-wide assessment process. Second, assessment can be done within the individual capstones, with findings used for decision-making at the course level and compiled across capstone sections to reach conclusions about the overall program. Ultimately, choices about method and process for either kind of assessment process will depend on campus culture, types of information desired or needed, and availability of various kinds of resources and support.

Institution-Wide Scoring: The Issues

Collecting student artifacts from across capstones is sometimes viewed as the standard in that it is based on an institution-wide sample. Scoring of such a sample yields information that creates cross-campus buy-in and is perceived as meaningful to faculty and administrators from all the various programs on campus. For successful use of this approach, there are at least three kinds of logistical decisions to be made during planning.

The first decision regards the kinds of artifacts to be collected. Should a common assignment be developed for inclusion in all capstone courses? If so, will that be acceptable to faculty teaching the various capstones and the departments or programs in which those capstones are housed? If the assignment is not valued and developed by faculty teaching the capstones, will it be weighted sufficiently in grading to ensure that students in all capstones take it seriously? On the other hand, if faculty will be allowed to submit various kinds of artifacts, will there be enough commonality across them to make cross-campus scoring plausible and meaningful?

Second, once a decision about the kind or kinds of artifacts to be scored is reached, a plan must be developed for collecting and organizing the student work products. Perhaps all students in all capstones will be required to submit one or more work products demonstrating the general education learning outcome of interest, or perhaps the aim will be to collect a sample. Electronic collection may be convenient, especially if students are submitting electronically within their courses or if work products submitted may be in various formats, including, for example, videos, photographs, or musical productions rather than only traditional papers. On the other hand, if some faculty receive student work in hard copy form, they may be unwilling to cooperate with a submission process that requires them to upload artifacts from their classes. Regardless of format, most faculty will want reassurance that student identity is protected which means removing student names and other identifiers. Faculty may also be concerned about anonymity with regards to their own reputation, or about faculty evaluation issues becoming entangled with assessment. Faculty anonymity is more difficult to protect, especially on a relatively small campus, or if assignments vary across sections. However, a sampling approach can mitigate some of the concerns by minimizing the likelihood that large numbers of student artifacts from any particular class will be scored. If artifacts are not in response to a common assignment prompt, assignment descriptions will likely need to be collected and linked to the appropriate work products as well. All of these documents need to be saved, virtually or in hard copy, in a way that

allows sampling (if desired) and protects privacy to the degree determined appropriate.

The third and final set of decisions concerns plans for the scoring process. Will faculty have stronger buy-in if they develop their own institutional rubrics? Can existing rubrics be used – either previously developed for the campus or cross-institutional versions like the Association of American Colleges and Universities VALUE rubrics? Who will do the scoring, and how will scorers be recruited or incentivized? How will those scoring be normed on the rubric(s) to ensure that they are understanding criteria similarly? Once norming is completed, will scoring occur in a workshop setting, or will faculty score from the privacy of their own offices over a pre-determined period of time? How many student work products must be scored, and how many readings are needed for each artifact?

Institution-Wide Scoring: Examples

The complexity of planning a cross-institutional scoring can be intimidating, but case examples demonstrate that the process is both feasible and meaningful. The University of Saint Francis, for example, uses an institution-wide scoring process administered through their Office of Institutional Research. Their process for assessing capstones, in use for a second year in 2012, allows each capstone faculty member to submit artifacts of his or her choice which demonstrate two of the eight general education goals. Those artifacts are scored against institution-specific rubrics created by USF faculty. In any given year, artifacts scored might include research papers, case studies, and performances of various kinds. Faculty members are compensated through the Office of Academic Affairs. Norming occurs in a workshop setting, with faculty completing scoring of their assigned artifacts over the following week.

Because USF is relatively early in the process, a complete cycle of goals has not yet been scored (all eight goals will be scored over a four year period). However, even at this early stage, those overseeing the USF general education program are accumulating direct assessment findings for their general education goals. They are creat-ing ownership and understanding of general education among faculty from across campus, whether they teach traditional general education courses, teach capstones, or participate in scoring. As goals scored in the capstone are also scored in lower-division courses, they have the opportunity to document growth in outcomes recognized as critical for all USF students. Because capstone courses were designed as the top of a curricular scaffold, repeating learning outcomes students experience in a variety of courses earlier in their undergraduate education, USF has the opportunity to compare the direct and indirect scores on the capstone-specific learning outcomes of underclassmen and graduating seniors. The wedding of the professional and general education outcomes has also allowed the USF to be more explicit about what the university expects a baccalaureate graduate to achieve upon leaving the university and to examine student growth of students in the four outcomes.

Additionally, the summer assessment workshop has generated a culture of professional development around general education assessment. One barrier that has become clear with USF's assessment of the general educational capstones is the sheer volume of resources (human and capital) required by our assessment design at this small college. USF also struggles with how to effectively use the data and how to avoid becoming mired in discussions about the quality of data. A significant growth in new faculty who have fewer than four years at the institution and who were not part of the original curricular redesign has also led to a diminished understanding of the purpose and teaching of capstone courses.

In contrast, Champlain College has experimented with campus-wide scoring sessions, but until recently has relied on in-semester scoring by section instructors. Unlike USF, Champlain uses common assignment parameters designed to provide artifacts that will be assessable on four general education outcomes: integrative

> General education outcomes and professional program outcomes have come to overlap significantly since the turn of the Millennium.

thinking, metacognitive skills (i.e., those skills which make students successful independent learners), ethical awareness, and written communication. Instructors still have the autonomy to develop specific assignments appropriate to their particular discipline, within boundaries established by a common rubric and description. Artifacts are submitted electronically and scored by the faculty in each capstone, with the resulting data gathered by the institution through its e-portfolio software.

Champlain experimented with a summer scoring session in 2012 for the first time. This proved to be a valuable complement to the assessment of work in-semester. Even if they do not generate significant amounts of reliable evidence, scoring sessions can be still be effective in field testing new rubrics, building understanding of standards and assessment practices among session participants, and identifying gaps in the existing assessment practices. The 2012 scoring workshop at Champlain identified significant issues with the common assignments as they were implemented across various sections, leading to workshops in the fall aimed at building more commonality and effective use of the common assignments.

Within-Course Scoring: The Issues

An alternative approach to general education outcomes assessment within capstones is to require faculty teaching capstone courses to conduct their own assessments of general education goals addressed within the course. This ensures that faculty score their own students, which makes them well aware of learning outcomes achieved—or not—within classes they teach. However, as is the case with institution-wide processes, there are decisions to be made and questions to be answered to ensure successful implementation.

The first set of decisions regards the degree of course-level autonomy. Will faculty be free to independently design assignments? Will faculty determine how to score and how to report? Will both quantitative and qualitative data be acceptable? Allowing faculty to make most of their own decisions can be appealing, especially on a campus with a wide variety of majors, including both professional degrees and traditional liberal arts programs of study. Greater autonomy may result in assignments for general education scoring which are more thoroughly incorporated into the course, more highly valued in the grade, and, thus, more seriously addressed by students. On the other hand, greater uniformity in processes will make it easier to compile data from across campus in a meaningful way.

Ultimately, decisions about faculty autonomy may depend on the purpose of assessment. If an important goal for the assessment process is to ensure that findings are used to make course-level changes that improve learning, it may be desirable to have faculty directly controlling assessment strategies and scoring for their own students. Findings generated specifically from their own students, using strategies teachers themselves find meaningful, may be more compelling. On the other hand, if the primary aim is to generate data that can contribute to an institution-wide snapshot of general education outcome achievement, there may be an argument for greater consistency of data and, thus, less faculty autonomy. Qualitative and quantitative data, generated from a wide range of assignments and artifacts, can be difficult to "add up" coherently for distribution to various audiences for assessment findings.

A second set of issues regards mechanisms and logistics. How, why, and when will faculty conduct assessments? How will they report findings? Will there be rewards (to encourage) or penalties (to enforce) compliance with the expectation that faculty engage in this work? How will you encourage meaningful assessment processes and thoughtful analyses rather than *pro forma* fill-in-the-blank kinds of responses? As compelling as it is to put assessment responsibilities in the hands of people teaching general education courses, especially at the capstone level, the advantages of such a system can be overwhelmed by the challenges, if thoughtful mechanisms are not developed for encouraging meaningful compliance.

Finally, there are questions about programmatic use of within-course assessment find-

ings. Who receives and reviews the data? How are the faculty submitting assessment reports included in the conversation? What is the process for ensuring that findings are used for program-level decision-making? And if capstone faculty do not perceive that anyone is reading and using their reports, will they continue to conduct assessment and submit findings?

Within-Course Scoring: Examples

The University of North Dakota (UND) provides one example of how a within-course scoring process can work. The UND General Education Committee established a "validation" process for courses proposed for inclusion within the general education program; this same process is used for courses serving as discipline-specific general education capstones. As part of general education validation, course faculty identify general education goals to be addressed, demonstrate how the goal will be addressed, and describe how student learning around that goal will be assessed. Once validated, courses are regularly revalidated on a rolling schedule. During revalidation, course faculty submit assessment results and analysis for review by members of the general education committee.

This outcomes assessment process parallels the way assessment occurs within many programs of study at UND, with faculty responsible for conducting assessment and providing results for learning outcomes which are addressed within their own courses. In most cases, faculty in general education courses, including capstones, choose to make small adaptations

Craig Pepin

in existing assignments to ensure that data regarding general education outcomes can be disaggregated from other criteria affecting the assignment grade. Faculty decide what the findings mean and make use of those findings in their own courses. However, both results and analysis are also reviewed by members of the General Education Committee, with committee conclusions recorded using a standard form. Each summer, information collected via those forms is consolidated into a brief summary report. Those summary reports, together with more impressionistic findings from reviews of individual revalidation reports, are considered in making decisions about the general education program.

North Dakota State University (NDSU), like UND, uses a process that is anchored in assessment of student work by individual faculty. Since 1996 about one-half of departments have been regularly reporting on their own course level assessments in major-specific capstones. That assessment information is reported, on an annual basis, to the University Assessment Committee; however, the primary intent of the process has been to provide formative assessment at the department and course level (i.e., collecting course-level data for use by faculty in the program) rather than to provide data that can be aggregated across campus into an institution-wide portrait. Consequently, assessment mechanisms vary significantly from rubrics based on accreditation standards or disciplinary norms, to home-grown content-based examinations, or pre- and post-tests. This process is now somewhat in flux as NDSU is completing a campus-wide capstone evaluation process with the "applied learning" benchmarks from the Lumina Foundation's Degree Qualifications Profile as part of their accreditation relationship with the Higher Learning Commission. Campus leaders hope that this process will lead departments to more clearly defined learning outcomes and more careful scaffolding of them, while also providing the impetus for more comprehensive campus-wide assessment of student learning in capstones.

Champlain College has also primarily used within-course scoring to generate evidence on institutional outcomes. In some ways, its approach up to now might be considered as a hybrid: instructors design course specific assignments within general parameters set by the college, and the resulting artifacts are scored by the instructor. However, the data is primarily collected at the institutional level and used for institutional outcomes assessment, and only secondarily for individual instructor and course improvement. The evidence generated through this system is therefore more easily comparable across sections, but the issues of reliability of the data given the large number of scorers, remains an enduring challenge for this approach.

Methods Planning: Summary

Capstones clearly provide an unmatched opportunity for authentic assessment of general education program outcomes, and that remains true whether the capstones are officially designated as part of the general education program or whether they are entirely owned by programs or departments. Student work products generated through capstones can be scored to generate data that speak to both individual faculty and the program overall. Conducting this kind of outcomes assessment of general education, using work products in which students are highly invested and likely to be demonstrating their "best work," is certainly a best practice in general education assessment.

Moreover, conducting an assessment of general education learning outcomes through student work generated in capstone courses has other advantages as well. Such an assessment can generate more continuity between the general education program and various majors. It can build ownership for the general education program among faculty who rarely teach standard lower-division general education courses. It can provide meaningful opportunities for faculty development related to both assessment and general education. Conducting a meaningful outcomes assessment which has the potential to inform program improvements, while also yielding these related benefits, begins with a thorough consideration of the general education program information needs and the campus culture.

Joan Hawthorne and Tom Steen

BARRIERS *and* OPPORTUNITIES *for* MAJOR-SPECIFIC CAPSTONES

Capstone experiences that both address campus-wide general education outcomes and are major-specific provide a powerful opportunity for institutions to produce student artifacts that are often especially authentic and meaningful. Because these capstones are major-specific, they are directly connected to real-world projects that students will engage in after they graduate. They can also help bridge the gap between general and specialized education by aligning learning outcomes and faculty efforts across the divide and by encouraging all departments to have a stake in general education.

Constraining Factors

Realizing that there is no single right answer for all colleges and universities, what factors and strategies need to be considered when developing a workable assessment structure for assessing general education outcomes in capstones embedded in the major? We suggest there are three significant factors to consider: campus culture, resources, and governance.

All of us have a sense of the culture on our own campus, but how might that affect major-specific capstones? To what extent does your campus mission (whether religious or secular) provide opportunities or obstacles? Presumably, a clearly focused mission points directly toward learning outcomes to be assessed in capstones. What is the alignment between the explicit campus mission and the enacted or implicit campus mission? For example, does your campus proclaim it is focused on student learning, but have a reward structure sharply tilted toward research and publication? Do the types of students your campus attracts and the types of careers they pursue help or hinder developing major-specific capstones? What are the balances between undergraduate and graduate education, between online and face-to-face programs,

between "traditional" and "non-traditional" students, between teaching and research? What are faculty expectations about how things are to be done? Are individuals, departments and colleges highly autonomous or do they share a strong sense of community? Does your campus see itself as a change-embracing, "innovative university," or does it pride itself on maintaining traditional structures and practices? Is the story you tell about your campus history, your "campus saga," of the turning points in institutional history, a source of strength or an obstacle when changes are proposed? Which faculty and departments are strong gatekeepers who can prevent or facilitate initiatives? Is information about student performance widely shared or is it jealously guarded because of fears about how it might be used? Do faculty expect to have the final approval in the curriculum? Are there existing senior seminars or projects that can be used as models for capstones? Accurately reading and "plugging into" your campus culture or campus DNA can help you avoid serious mistakes.

Campus priorities will be strongly affected by the program mix. What is the balance among programs in the traditional liberal arts, pre-professional, or professional? Major-specific capstones can help overcome the tensions that often exist between liberal arts and professional or specialized education. Although the demands of accreditors for professional programs can be one of the manifestations of the tension between liberal and professional education, these capstones provide opportunities for a wider group of faculty to be engaged with general education. In the process of constructing and assessing the capstone, discipline-based faculty may come to understand, perhaps even accept and embrace the particular challenges of general education.

Many of us are inclined to "dream the impossible dream" of sufficient campus resources to build and sustain our vision of an ideal assessment or general education program, but in the increasingly resource-constrained world of higher education, what campus resources are most important to consider when contemplating major-specific capstones? They are mostly the same as for any other campus initiative. How much time and energy can be devoted to building a campus consensus and sustaining an effective assessment program? Are campus leaders, both faculty and administrators, fully supportive? Do you have or can you build the political capital to generate sufficient faculty buy-in? Who will oversee the program once it is operational? Will there be funding for stipends for faculty who independently assess the student artifacts? Will you need additional staff and extra space to coordinate your assessment? Will there be an effective data management system? Will the faculty reward and recognition system value these efforts?

The final factor to consider is governance. How are decisions made on your campus? Turf wars can be taken for granted, but needing to convince an elected group of faculty representatives is usually easier than working with the dynamics of an all-faculty assembly where not everyone shows up and a few powerful voices (CAVEs—Colleagues Against Virtually Everything) can derail a carefully constructed initiative. What external bodies do you need to convince, inform, or hope they ignore your plans? How active is your board of trustees? If you are a public institution, do a majority of your state legislators believe they should have the final say in general education? Are there powerful donors, employers, or alumni who can be your allies? Can you agree on general education outcomes to assess in capstones that are consistent with the standards of the many professional associations that accredit programs on your campus? Major-specific capstones by their nature will need to be sensitive to multiple lines of reporting and multiple audiences.

> Rubrics created and normed by capstone faculty groups constitute the "gold standard" for methods of assessing liberal education.

Strategies for Seizing Opportunities

Just as there are three broad categories of potentially constraining factors (culture, resources, governance), we also see three broad areas for strategy: faculty involvement, assessment planning, and assessment implementation. Because of the nature of the professoriate, it is absolutely essential that campuses incorporate the widest possible faculty ownership for the program. The best way to ensure this is by emphasizing assessment as a tool for improving student learning and giving faculty the initiative in designing courses and in selecting and assessing evidence. Faculty should be involved in creating rubrics for scoring student artifacts and in planning and implementing workshops that interpret the resulting evidence. Faculty already use student artifacts in order to evaluate student learning and assign grades. Interpreting the results of assessment and then moving towards actionable conclusions builds faculty development and creates sustainability.

Institutions should fund faculty to attend conferences on assessment and general education and should encourage faculty scholarship from their assessment work. If assessing general education outcomes in major-specific capstones is to be effective, if it is not just going to depend on the goodwill of good campus citizens, if it is truly to be a journey promoting faculty growth and learning and not just a data generation process, then it needs to be incorporated into the reward and recognition system of the campus. Faculty motivated to use assessment evidence to improve their own pedagogy should be rewarded. Worthy, and worthwhile, assessment leads to an engaged faculty and to student growth.

But not all faculty are equally motivated or able at all times to focus on improving student learning through assessment. Therefore, careful coordination at some level of the methods for assessing student artifacts from the capstones is crucial. How do we ensure accountability in the departments and across the campus? To whom is assessment accountable? Is there appropriate leadership, with adequate support and authority, to manage the assessment process? Does the campus reward not only individual faculty,

but also departments and deans for being committed to assessment? Does the process provide the type of actionable feedback for faculty that can help them improve their courses so they can realize a tangible benefit from participating? Does the planning include quality control mechanisms such as multiple methods, valid sampling and scoring processes, and periodic revalidation of the capstones?

The final category of strategy is implementation of assessment in capstones. Unless your campus is in Lake Wobegon, inevitably you will need to negotiate to get assessment of general education outcomes in capstones adopted. Most often this focuses on how to align liberal arts and professional curricula, but without adding credit hours or reducing faculty and departmental autonomy. Fortunately, as noted previously, one of the benefits of major-specific capstones is that they can unite the objectives of general and specialized education. Finally, the student artifacts from major-specific capstones are often impressively authentic and meaningful, because both students and professors have a vested interest in this work in which students integrate and apply what they learned as undergraduates and prepare to launch themselves to their future worlds of work or further education.

Worthy assessment of general education with capstones embedded in the major is all about faculty involvement, faculty ownership of the assessment, faculty ownership of the assignments, faculty ownership of the rubrics, and faculty participation in the scoring. Although this is a serious commitment of time and energy, there is also a significant value in this kind of assessment. It puts into play all the active factors of faculty involvement—strengths, weaknesses, and opportunities for improvement.

Conclusion

Since the late 19th century, when American higher education melded the tradition of the English residential college together with the German research university ideals to create a uniquely American model of higher education, there has been ongoing tension between practical training and specialized disciplinary knowledge on the one hand, and the ideals of general education on the other. The continuing specialization of knowledge domains, and concerns of students and their parents to "get something useful" out of increasingly expensive baccalaureate education, shows that this tension is alive and well today. Moreover, these general education ideals are under increasing pressure to become "efficient" in the new era of constricted resources and ever-expanding enrollments. In the face of such pressures, we need renewed commitment to assessment that is worthy of that American model of educating the whole person. American colleges and universities have many different paths to a general education that cultivates personal responsibility and civic engagement, appreciation for culture and cultural difference, and the ability to analyze, evaluate and communicate. We need assessments that capture those learning goals in all their richness and complexity.

Many professional accrediting agencies now include learning outcomes that are essentially general education learning outcomes as part of their expectations for professional training. Professional faculty are therefore already engaged in forms of general education even if they don't recognize it. Embedding general education outcomes in major specific capstones is no longer like forcing a square peg into a round hole. As more institutions recognize that general education outcomes and professional and disciplinary outcomes align in surprisingly large part, approaching assessment as a common program between the two sides helps move towards greater integration.

This approach can also lessen the tension between specialized, practical training on the one hand, and general education on the other. Increasingly, it seems as if general education in the liberal arts tradition is moving towards accommodating the understandable desire on the part of students and their parents to create value through preparation for a career, by adjusting courses and instruction to address skills and abilities that transfer into future professional life. Now professional programs are also recognizing the crucial value of general education, in

preparing students for an ever changing and complex workplace where the typical worker will change professions many times over the course of a career.

Given this increasing alignment of outcomes between general and specialized education, how should they then be assessed? Nationally normed tests such as the Collegiate Learning Assessment or the Educational Testing Service Proficiency Profile are good tools, but they do not have that direct link to campus-specific student learning. Just as general education seeks to cultivate individual responsibility, though acknowledging such development varies from person to person, so too should assessment—while taking account of whatever best practices actually work—be adapted and fitted to local conditions.

If faculty and administrators work together to assess big outcomes which bridge generalized and specialized knowledge, then it helps the campus think of general education as a whole and collegially, rather than as individual and disconnected pieces (e.g., "my students," "my course"). When faculty "rub shoulders," norm together, read papers together, and make meaning together, then general education becomes a shared program focused on all students. In this way, assessment that is rooted in local practice can truly inform the individual craft of teaching and learning, and fulfill our collective responsibility as educators.

Susan Ray-Degges

Matt Smith

Larry Peterson

Elizabeth Kuebler-Wolf

EPILOGUE

John Nichols—Saint Joseph's College

At the end of our report, we now take a couple of pages to make explicit what we judge to be the main points in all the pages that have gone before. There are three things that we have tried to dethrone or demote from top ranking, two closely related things whose rank we truly want to elevate, and lastly one other radical value that may be the key to everything positive that we have written.

The first demotion involves *accountability*; it needs to be done, but it is not the prime value. Learning is first in rank, and accountability merits a place further down or in back of that. While we're out on this limb, let's edge out even a bit further. A culture of *assessment*, as some accreditors demanded a while back, is not necessarily a virtuous thing. What would be first-rate is a culture dedicated to excellence in learning or a culture of Continuous Quality Improvement—with good assessment as the means to this end. We've tried to focus on learning and on some essential commitments within the craft of teaching in order to keep these priorities in the proper order. The three stories in Chapter One traced how this inversion of rankings transforms assessment from what THEY want to what WE do—joyfully even!

The third demotion has been more implicit; *benchmarking* local data by means of commercially available tests is also of much less value than data from home-made, in-class assessments. Those tests are expensive; students need to be bribed to do them (and perhaps even then not with their best effort); faculty complain about their validity; and sometimes they constitute an easy way to absolve faculty from being the people primarily responsible for assessment of student learning.

The theoretical argument in favor of these tests, based on alleged subjectivity of faculty judgments in contrast to alleged scientific objectivity of the tests, is not convincing. A better philosophy understands objectivity as a triumph of rational subjectivity. Objectivity is one choice among the various ways a knowing subject can seek to make sense out of some phenomenon; Whitehead and Wordsworth, for example, would claim that feeling is more basic and therefore prior. Personal judgment is at the root of all objectivity, even that of empirical science. So what is going on here is that resorting to these tests in more than a peripheral or secondary manner amounts to *outsourcing* judgments of the quality of student performance. Given the disadvantages connected with use of such tests, as listed above, there may be better and more immediately available ways of procuring accurate and useful data on student learning.

What we are positively endorsing, as opposed to demoting, are first of all high-quality faculty *judgments* and secondly the method that grounds the quality of these judgments, the *rubric* (Chapter Two). Our constant goal has been to match, at capstone levels, the best assessments that faculty can make with the best undergraduate work that students can do (Chapters Three and Four). Faculty can formulate in a rubric for a capstone assignment descriptors of the cumulative learning they expect of about-to-graduate students, the learning engendered by previous program coursework. In view of such preparation, the rubric is a *valid* measure of student learning and experienced as such by both students and faculty; the outcomes match the learning.

Secondly, the faculty also take steps to norm or to calibrate the judgments they make in assessing student artifacts by means of the rubric. This takes time and much collaboration, but it gains not only an acceptable but a high degree of *reliability* in the capstone assessments. The norming matches the judgments to the outcomes.

Finally, the use of the phrase "the student's best work" is not an idle claim. Situating this assessment in the capstone stimulates and draws on student motivation as fully as one can. The signature assignment within the capstone is the student's chef d'oeuvre or masterpiece, making the *authenticity* of this assessment unequalled anywhere else on the undergraduate level.

I have been involved in seven national projects dealing with liberal and general education—all the way from FIPSE's National Project IV in 1979 through this 2012 AGLS project—and I've functioned as project director for the last four of them. What I have seen as the single most important factor contributing to whatever success any of those projects achieved is *COLLEGIALITY*. The inventory of the ways in which this happens is lengthy. One project went so far as to define liberal education for the 21st century as a collaboration between general education and the major (or professional program). Many general education programs and some professional programs themselves are designed as united endeavors of a number of disciplines. All of those projects depended on cooperative work from a dozen or more distinct institutions. Our approach to both the design and the application of capstone rubrics in this project relied on generous amounts of collaborative work on the part of faculty.

Collaboration with other institutions on quality enhancement projects can also generate collegiality within an institution. So widening the circles of collegiality will almost always be a positive development. The Higher Learning Commission of the North Central Association learned this lesson extremely well with its voluntary AQIP approach to regional accreditation: these schools quickly became partners in quality enhancement. Specialized or programmatic accreditors do the same thing within their respective professions. AAC&U has organized both topic-centered and State-centered communities of improvement. Religiously affiliated institutions have sought out and supported one another for centuries. And organizations are not needed to establish cooperative relationships; neighbors might just do it. (Vincennes University and Saint Joseph's College have begun to read each other's sophomore-level papers to see what they can learn from one another.)

The proverbial bottom line to all this is that AGLS has only started, with this project and with its report, the conversations that will improve assessment and learning in liberal education. We invite readers to let project members know how well we have done. Better yet, please improve and extend our work to more places and to higher levels of quality. Share your discoveries at future AGLS conferences. The evidence clearly seems to indicate that everyone has much to gain by widening the circles of collegiality.

APPENDIX

Project Participants

Champlain College (VT)
Craig Pepin
Assistant Dean for Assessment
cpepin@champlain.edu

Ivy Tech, Lafayette (IN)
David Berry
Dean, School of Liberal Arts & Sciences
dberry19@ivytech.edu

Miami Dade College (FL)
John Frederick
Senior Assessment & Planning Associate
jfrederi@mdc.edu

Barbara Rodriguez
Senior Assessment & Planning Associate
brodrig8@mdc.edu

North Dakota State University
Larry Peterson
Director of Accreditation, Assessment,
and Academic Advising
Larry.R.Peterson@ndsu.edu

Susan Ray-Degges
Interior Design Program Coordinator
Susan.Ray-Degges@ndsu.edu

Portland State University (OR)
Sukhwant Jhaj
Director, University Studies
jhaj@pdx.edu

Vicki Reitenauer
Women, Gender, and Sexuality Studies
vicr@pdx.edu

St. Edward's University (TX)
Cory Lock
Associate Dean of University Programs
julial@stedwards.edu

Robert W. Strong
Associate Professor of University Programs
bobs@stedwards.edu

Saint Joseph's College (IN)
Fr.Jeffrey Kirch, C.PP.S.
Director of Core Curriculum Capstone
jkirch@saintjoe.edu

Michael Malone
Dean of the Core Curriculum
malone@saintjoe.edu

John Nichols (**Project Director**)
NEH Distinguished Teaching Professor
nichols@saintjoe.edu

University of North Dakota
Thomas Steen
Director, Essential Studies
thomas.steen@mail.und.edu

Joan Hawthorne
Director of Assessment &
Regional Accreditation
joan.hawthorne@mail.und.edu

University of St. Francis (IN)
Matt Smith
Dean, School of Arts & Sciences
msmith@sf.edu

Elizabeth Kuebler-Wolf
Program Director for Art History
ekueblerwolf@sf.edu

Vincennes University (IN)
Chad Bebee
Assistant Professor of English
cbebee@vinu.edu

Michael Gress
(AGLS Executive Committee)
Interim Director of Institutional Effectiveness
mgress@vinu.edu

Laurel Smith
Professor and Chair of English
lasmith@vinu.edu

Portland State University

Vincennes University

In the spirit of continuous quality improvement,
the AGLS Executive Council
solicits and welcomes any and all suggestions
for improving this monograph.
Please e-mail your suggestions to
the AGLS Executive Director, Joyce Lucke:
joyce@paragonme.net.

NOTICE:

The AGLS offices have moved since the publication of this monograph.

Please update your records to reflect our office's new mailing address and other contact information.

Thank you.

Association for General & Liberal Studies

2236 Newton Street

Columbus, Indiana 47201

(812) 390-6912

execdir@agls.org

www.agls.org

Association for General and Liberal Studies
445 Fifth Street, Suite A
Columbus, IN 47201

(812) 376-7468
www.agls.org